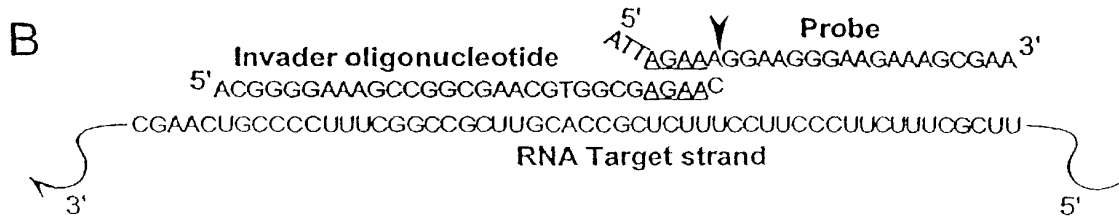
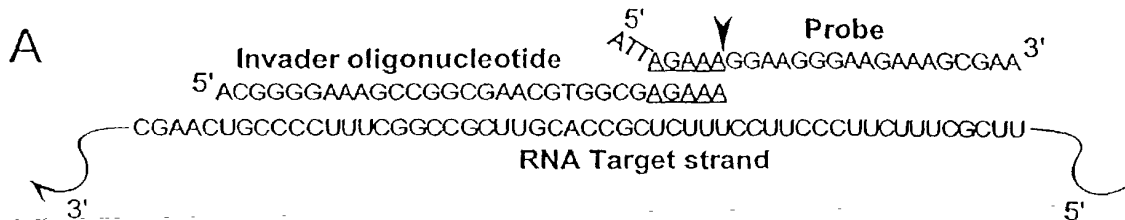


FIGURE 1

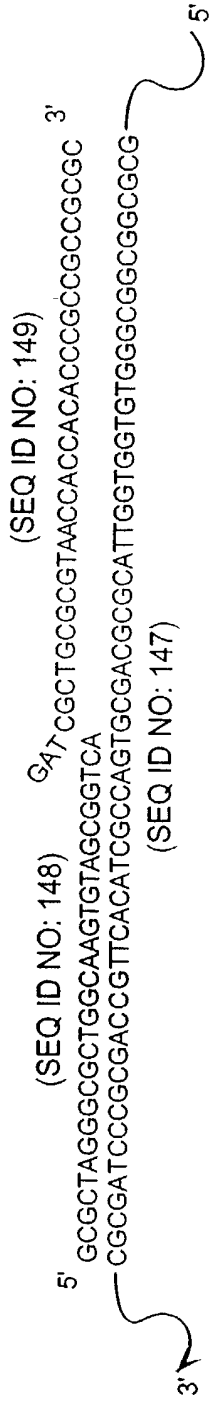


FIGURE 2





A



B

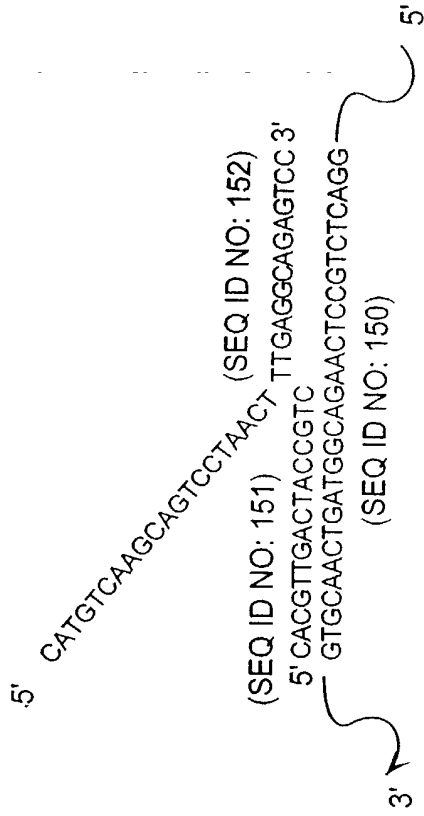


FIGURE 3

10004559 . 2002002

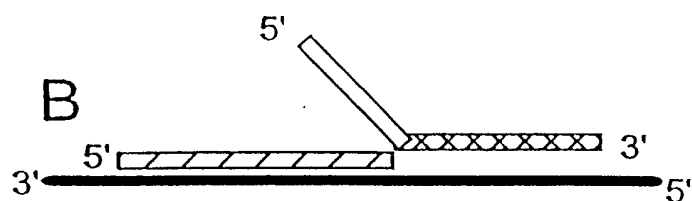
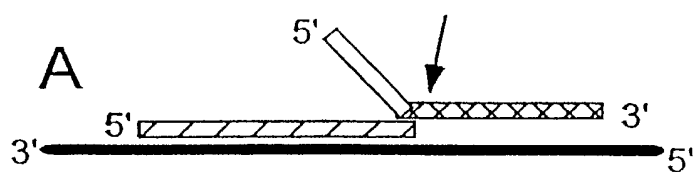


FIGURE 4



10/24/02 10:24:02

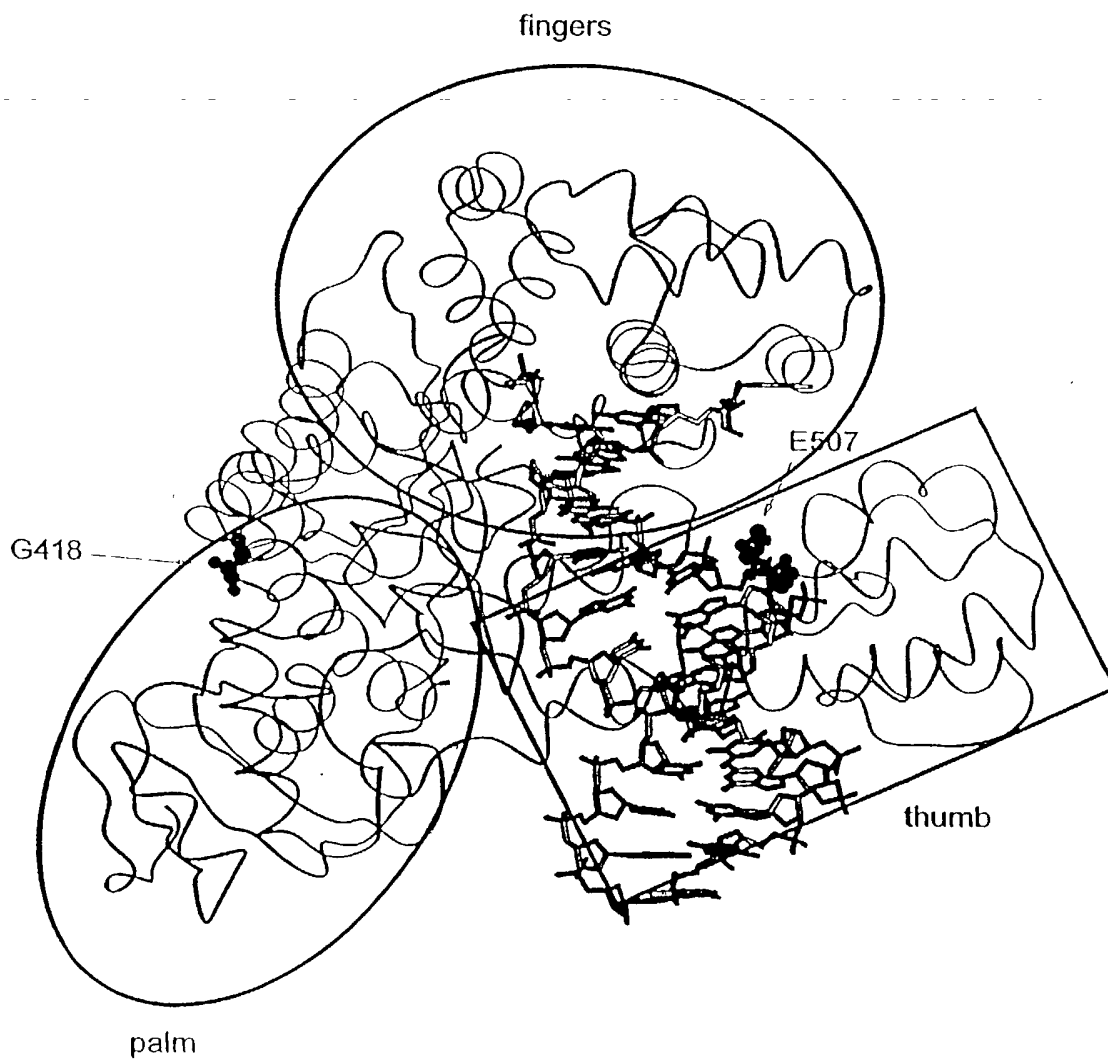


FIGURE 5

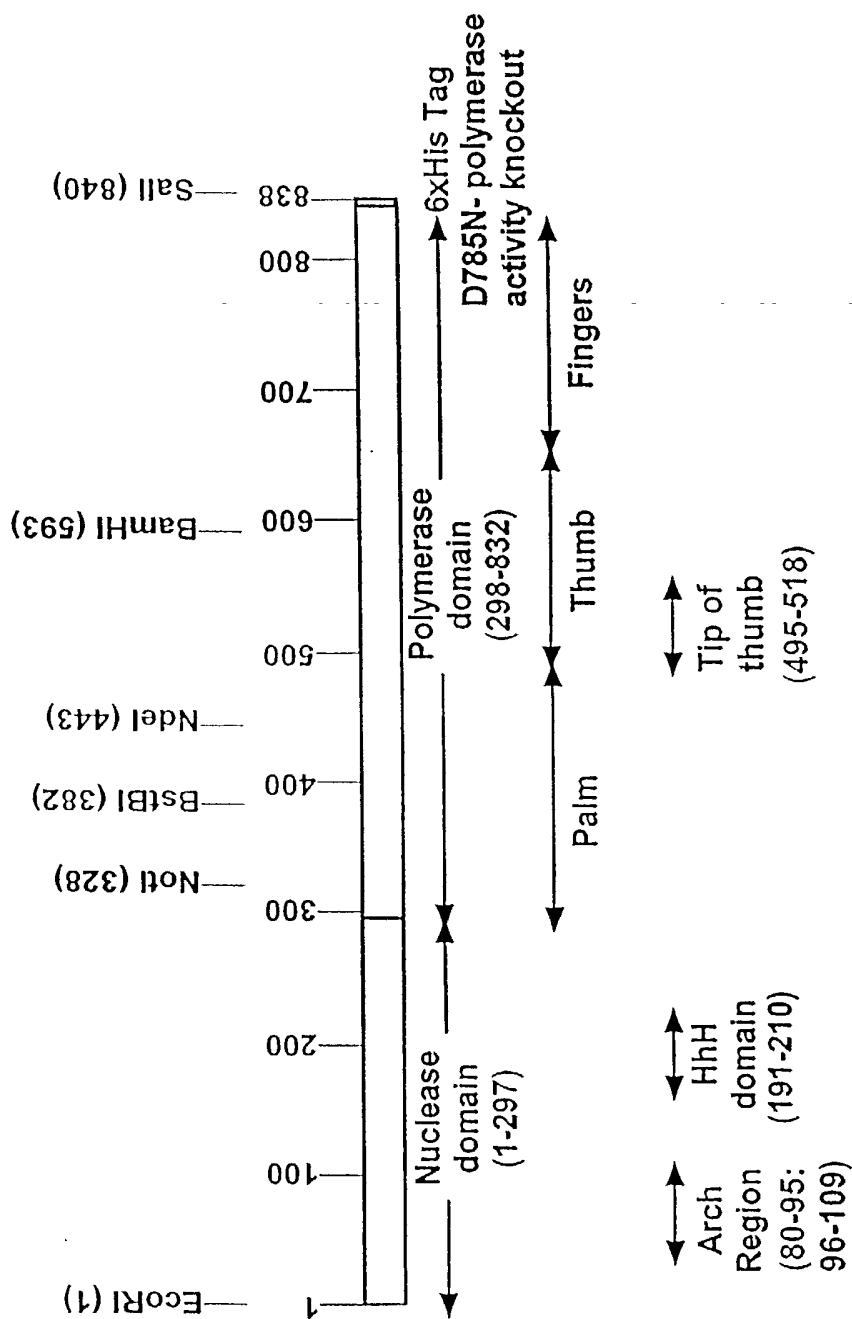


FIGURE 6



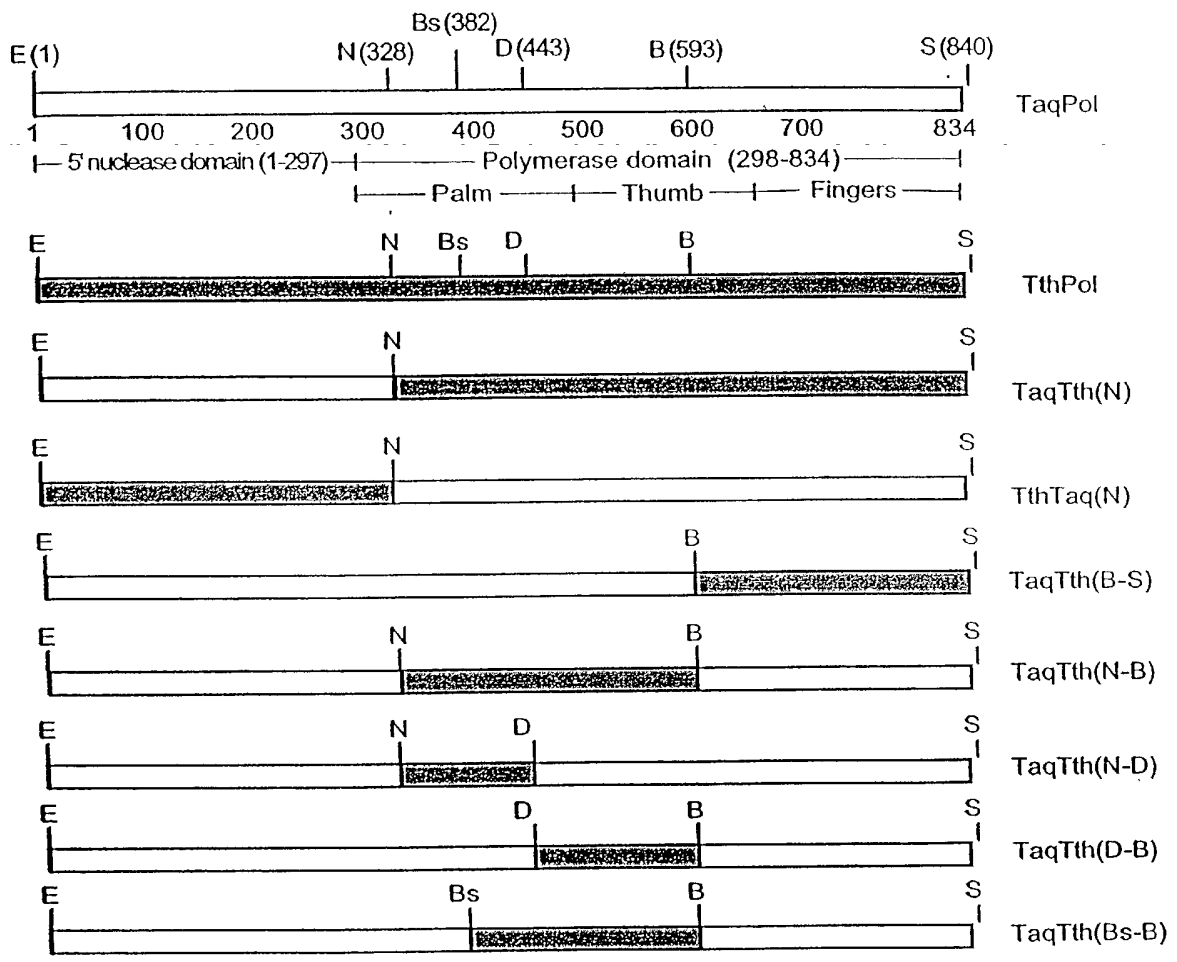


FIGURE 7







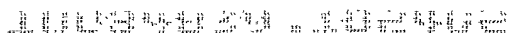


FIGURE 8C

MAJORITY [SEQ IDNO:156] TCGAGGGCCACATGGAXGACCTGAXGCTCTCCTGGAGCTXTCGAGGTCGGGACGGAGCTGGCCCTGGA

DNAPTAQ	[SEQ ID NO:153]	. . . T . . . . . C . T . . . A . . . . . C . GG . A . . . . .	784
DNAPTFL	[SEQ ID NO:154]	. . . GGG . . . . . C . C . . . GCC . T . . . C . A . . . . . T . . . . .	761
DNAPTTH	[SEQ ID NO:155]	. . . A . . . . . C . . . . . C . G . . . . . T . . . . . C . G . . . . . C . . . . .	770

**MAJORITY** GGTGGACTTGGCCCAAGXGGGGGGAGCCCGACCGGAGGGGCTTAGGGGCTTTCTGGAGAGGGCTGGAGTTT

DNAPTAQ	.....AA.....A.....T.....	834
DNAPTFL	.....GG.G.C.C.CACCA.....T.....T.....	831
DNAPTTH	.....C.....C.C.C.....C.....	840

MAJORITY GGGAGCGCTCCTCCACGGAGTTGGGCTCCTCGAGGGCGCGCAAGGCGCTGGAGGAGGGCGCGCTGGCGCGCGCG

DNAPTAQ	.....	T.....	AA.....	.....	904
DNAPTFL	.....	A.....	.....	G.....	901
DNAPTTH	.....	.....	.....	GGCA.....	T.....
	.....	.....	.....	G.....	910
	.....	.....	.....	GGCC.....	.....

CGGAAGGGGGCTTCGTGGCCTTTGTCCCTTTCCCGCCCGAGGCCATGTGGCGCGAGCTTCTGGCCCTGGC

DNAPTAD	.....G.....AAG.....T.....	974
DNAPTFL	.....T.TT.....TC.T.....T.....	971
DNAPTTH	.....G.....G.....G.....AAA.....	980

MAJORITY CCGCGCGAGCGAGCGCGCGTCCACCGCGCGACAGACCGCTTAXGGGCGCTXAGGGAGCCTXAGCGAGCGTG

Sequence	Position	Frequency	Count
DNAPTAQ	1	G	6
DNAPTFL	2	T	1044
DNAPTH	3	TG	1041
	4	GG	1050
	5	CG	1044
	6	CG	1041
	7	CG	1050
	8	CG	1044
	9	CG	1041
	10	CG	1050
	11	CG	1044
	12	CG	1041
	13	CG	1050
	14	CG	1044
	15	CG	1041
	16	CG	1050
	17	CG	1044
	18	CG	1041
	19	CG	1050
	20	CG	1044
	21	CG	1041
	22	CG	1050
	23	CG	1044
	24	CG	1041
	25	CG	1050
	26	CG	1044
	27	CG	1041
	28	CG	1050
	29	CG	1044
	30	CG	1041
	31	CG	1050
	32	CG	1044
	33	CG	1041
	34	CG	1050
	35	CG	1044
	36	CG	1041
	37	CG	1050
	38	CG	1044
	39	CG	1041
	40	CG	1050
	41	CG	1044
	42	CG	1041
	43	CG	1050
	44	CG	1044
	45	CG	1041
	46	CG	1050
	47	CG	1044
	48	CG	1041
	49	CG	1050
	50	CG	1044
	51	CG	1041
	52	CG	1050
	53	CG	1044
	54	CG	1041
	55	CG	1050
	56	CG	1044
	57	CG	1041
	58	CG	1050
	59	CG	1044
	60	CG	1041
	61	CG	1050
	62	CG	1044
	63	CG	1041
	64	CG	1050
	65	CG	1044
	66	CG	1041
	67	CG	1050
	68	CG	1044
	69	CG	1041
	70	CG	1050
	71	CG	1044
	72	CG	1041
	73	CG	1050
	74	CG	1044
	75	CG	1041
	76	CG	1050
	77	CG	1044
	78	CG	1041
	79	CG	1050
	80	CG	1044
	81	CG	1041
	82	CG	1050
	83	CG	1044
	84	CG	1041
	85	CG	1050
	86	CG	1044
	87	CG	1041
	88	CG	1050
	89	CG	1044
	90	CG	1041
	91	CG	1050
	92	CG	1044
	93	CG	1041
	94	CG	1050
	95	CG	1044
	96	CG	1041
	97	CG	1050
	98	CG	1044
	99	CG	1041
	100	CG	1050



FIGURE 8D

MAJORITY [SEQ ID NO:156] CCGGGXCTCCTCGGCAAGGAGCTGGGGCTTTGGGGCTCAGGAGGGCTXGACCTXTGCCCGGGGAGCG  
DNAPTAA [SEQ ID NO:153] .....G..T.....A.....AG.....C.....A.....T..G....CC.....C..... 1114  
DNAPTFL [SEQ ID NO:154] .....AA.....G.....G.....G.....T..G....A..A..... 1111  
DNAPTTH [SEQ ID NO:155] .....C.....C.....TG.....G..A.....G.....G..... 1120  
MAJORITY ACCGCATGCTCCTCGGCTAGCTGCTGGAGCGGCTCCACACACCCCGAGGGGTGGCCCGGGGCTAGCG  
DNAPTAA .....T..... 1184  
DNAPTFL .....T.....T.....T..... 1181  
DNAPTTH .....G.....G.....G..... 1190  
MAJORITY GCGGGAGTGGAGCGGAGGAXCGGGGGAGCGGGGCTCCTXTCCGAGAGGCTTCCXGAAGCTXXGAG  
DNAPTAA .....G.....G.....T.....GCC.....GCC.....GTG..G. 1254  
DNAPTFL .....T.....A.....GG.....C..C.....A..C....AAA.... 1251  
DNAPTTH .....C..G.CCG.C.....C..G.....CAT..G.....CGTA.. 1260  
MAJORITY GCGGTTGAGGGGAGGAGGCTCCTTTGGCTTACGAGAGGTGGAGAGCGGCTTCCCGGGTCCCTCG  
DNAPTAA A..G.....G.....G.....G.....G.....GCT..... 1324  
DNAPTFL .....A....A..A..AG.C..G.....G.....G.....GT... 1321  
DNAPTTH .....C.....A.....C.....C.....A.....C..... 1330  
MAJORITY CCGACATGGAGCGGACCGGGGTXCGGCTGGACGTGGGCTAGCTCGAGGGGCTXTCCCTGGAGGTGGCGGA  
DNAPTAA .....G..C.....G.....T...AG....T..G.....C.. 1394  
DNAPTFL .....GG.....C.....C.....C.....A..C 1391  
DNAPTTH .....C.....C.....A.....T.....T.....C..T..... 1400



FIGURE 8E

MAJORITY [SEQ ID NO:156] GGAGATCGCGCGCGCTGGAGGAGGAGGTCTTCGGCGCTGGCGCGCGCGCGCTTCAACCTCAACTCGCGCGGAG

DNAPTAQ [SEQ ID NO:153].....GC.....GC.....1464  
DNAPTFL [SEQ ID NO:154].....G.G.....AG..G.....1461  
DNAPTTH [SEQ ID NO:155].....T.....G.....1470

MAJORITY CAGCTGGAAGGGTGCTCTTTGACGAGGCTXGGGGCTTCGGCGCATCGGCAAGACGGGAGACXGGCAAGC

DNAPTAQ .....C.....A.....C.....1534  
DNAPTFL .....GC.....G.G.G..T.....G..G..A. 1531  
DNAPTTH .....TA.....T.G..G.....C.A.....A. 1540

MAJORITY GCTCCACACCGCGCGCTGCTGGAGGCGCTXCGAGGCGCGCGCGCATCGTGAGGAAGATCCTGCAGTA

DNAPTAQ .....C.....C..C.....1604  
DNAPTFL .....T.....G..A.....CGGG.....1601  
DNAPTTH .....G.....A..G.....G...G. 1610

MAJORITY CCGCGAGGCTCAGCAAGCTCAAGAACACCTACATXGAGCGCGCTGCGXGCGCTCGTCCAGCGCGAGCGCGGG

DNAPTAQ .....G...G.....T.....G.A...A.....1674  
DNAPTFL .....A.....C.G...G.....A...C... 1671  
DNAPTTH .....G.G.....G..AAG.....G..... 1680

MAJORITY CGCCTCCACACCGCGCTTCAACGAGAGCGGCGCACGGCGCGCGCTTAGTGGTCCGAGCGCGCAACCTGC

DNAPTAQ .....A.....T.....C. 1744  
DNAPTFL .....C.....TGG.....1741  
DNAPTTH .....G.....G.....1750





FIGURE 8G

MAJORITY [SEQ ID NO:150] AGCTTCCCAAGGTGGGGGCTGGATTGAGAAAGACCTGGAGGAGGGCAGGGGGGTACGTGGAGA  
DNAPTAQ [SEQ ID NO:153] ..... 2184  
DNAPTFL [SEQ ID NO:154] ..... A. .... GG. .... C. CC. .... T. .... 2181  
DNAPTTH [SEQ ID NO:155] ..... A. A. .... G. .... A. .... C. .... A. .... 2170

MAJORITY GCGTCTTGGGGGGGGGGCTAGCTGCCCGACCTCAACGCCCGGGTGAAGAGCGTGGGGGAGGGGGGGGA  
DNAPTAQ ..... C. .... A. .... AG. G. .... C. .... 2234  
DNAPTFL ..... T. .... C. .... 2231  
DNAPTTH ..... AA. AA. .... CA. .... C. .... 2240

MAJORITY GCGCATGGGCTTCAACATGCCCGTGCAGGGCACC GGCGGACCTCATGAAGCTGGCCCATGGTGAAGCTC  
DNAPTAQ ..... T. .... 2304  
DNAPTFL ..... G. .... GG. .... T 2301  
DNAPTTH ..... C. .... 2310

MAJORITY TTCCCGCGGCTXCAGGAAATGGGGGGCCAGGATGGTCCCTXCAGGTCACGACGAGGCTGGTCCCTCGAGGGGGG  
DNAPTAQ ..... A. .... GG. .... T. .... 2374  
DNAPTFL ..... T. .... C. .... G. .... TT. G. .... G. .... 2371  
DNAPTTH ..... C. C. G. .... G. .... C. .... CC. .... G. .... 2380

MAJORITY CCAAAGAGCGGGGGGAGGCGGTGGCGCGCTTTGGCCCAAGGAGGTCATGGAGGGGGGTCTATCCCGTGGGGGT  
DNAPTAQ ..... A. .... A. .... GG. .... CCGG. .... G. .... 2444  
DNAPTFL ..... G. C. .... AG. .... A. .... GG. .... CAG. .... 2441  
DNAPTTH ..... C. C. .... C. .... A. .... G. .... C. .... AA. C. .... C. .... 2450



2499  
2496  
2505

FIGURE 8H

MAJORITY	[SEQ ID NO:156]	GCCCCCTCGACCTGGAGCTGGGGATGGGGAGGACTGGCTCTCGGCCAAGGACTAG
DNAPTAQ	[SEQ ID NO:153]	.....A.....GA
DNAPTFL	[SEQ ID NO:154]	.....GC.....
DNAPTTH	[SEQ ID NO:155]	.....T.....GT...



FIGURE 9A

MAJORITY [SEQ ID NO:159] MXAML PLFEPKGRVLLVDGHHLAYRTFEALKGLTTSRGEPUAVYGFSAKLLKALKEDG- DAVXVVFDAK

TAQ PRO [SEQ ID NO:157] RG.....H.....I..... 69  
TFL PRO [SEQ ID NO:158] .....V.V..... 68  
TTH PRO [SEQ ID NO:1] E.....YK..F..... 70

MAJORITY APSFRHEAYEAYKAGRPTPEDFPROLALIKELVDLLGLXRLEVPGEADDVLATLAKKAEKEGYEVRI L

TAQ PRO .....GG.....A.....S..... 139  
TFL PRO .....V.....F.....R..... 138  
TTH PRO .....FT..... 140

MAJORITY TADRDLYQLLSDRIVLHPEGYLITPAWLWEKYGLRPEQWVDYRALXGDPSONLPGVKGI GEKTAXKLLX

TAQ PRO .....K.....H.....D.A.....T..E.....R...E 209  
TFL PRO .....E..I.....Y.....A.....I.....QR..R 208  
TTH PRO .....V...V.....H...E.....F...V.....L...K 210

MAJORITY EWGSLNLLKNLDRVKP-XXREKIXAHMEDLXLSXXLSXVRTDLPLEVDFAXRRPDRGLRFLERLEF

TAQ PRO .....A.....L...AI...L...D...K..WD.AK.....K.....R..... 278  
TFL PRO .....FOH..Q...SL...LQ.G..A.A..RK..Q.H.....GR..T.NL..... 277  
TTH PRO .....ENV...K..L...R..LE..R.....L.OG..... 280

MAJORITY GSLIHEFGLLXPKALEEAPWPPPEGAFVGFVLSRPEPMVAELLALAAARXGRVHRAXDPLXGLRDLKEV

TAQ PRO .....S.....K.....D.....G.....PE.YKA.....A 348  
TFL PRO .....G...A.....L..SF.....G.WE..L..Q...R.....G. 347  
TTH PRO .....A.AP.....K.....C.D.....A...A..K..... 350





FIGURE 9B

MAJORITY [SEQ ID NO:159] RGLAKDLAVLALREGLDLXPGDDPML LAYLLDPSNTTPEGVARRYGGWETEDAGERALLSERLFXNLXX

TAQ PRO [SEQ ID NO:157] S S G P E A A WG 418  
TFL PRO [SEQ ID NO:158] I F E A A QT KE 417  
TTH PRO [SEQ ID NO:1] S V AH HR LK 420

MAJORITY RLEGEERLLWLYXEVEKPLSRVLAHMEATGVRLODVAYLQALSLEVAEEI(RR)LEEEVFRLAGHPFNLNSRD

TAQ PRO R R A R A A 488  
TFL PRO K E R EA V Q 487  
TTH PRO K H L 490

MAJORITY QLERVLFDELGLPAIGKTEKTKRSTSAVLEALREAHPIVEKILQYRELTCLKNTYIDPLPLVHPRTG

TAQ PRO 558  
TFL PRO DR D I 557  
TTH PRO R L Q H V S 560

MAJORITY RLHTRFNOTATATGR LSSSDPNLQNI PURTPLGORI RRAFVAEEGWXLVALDYSGELRVLAHLSGDENL

TAQ PRO 628  
TFL PRO V V 627  
TTH PRO A A 630

MAJORITY IRVFOEGRDIHTOTASWMF GVPPEAVDPLMRRAAKTI NFGVLYGMSAHLRSOELAIPEYEEAVAFIERYFO

TAQ PRO 698  
TFL PRO E R Q 697  
TTH PRO K S G S V 700



FIGURE 9C

MAJORITY [SEQ ID NO:159] SFPKVRWIEKTL EGGRRRGYVETLFGRRRYVPDLNARVKSUREAAERMAFNMPVQGT AADL MKLAMVKL

TAQ PRO	[SEQ ID NO:157]	.....E.....	768
TFL PRO	[SEQ ID NO:158].Y.	.....G.....R.	767
TTH PRO	[SEQ ID NO:1]	.....K.....	770

MAJORITY FPRLEXMGARM LQVHDELVL EAPKXRAEXVAALAKEVMEGVYPLAVPLEVEVGXGEDWLSAKEX

TAQ PRO	.....E.....E...A...R.....I.....	833
TFL PRO	.....Q.L.....D...R.....W.Q.....L.....	831
TTH PRO	.....R.....L...QA...E...A..KA.....M.....G	835

XXXXXXXXXXXXXXXXXXXX

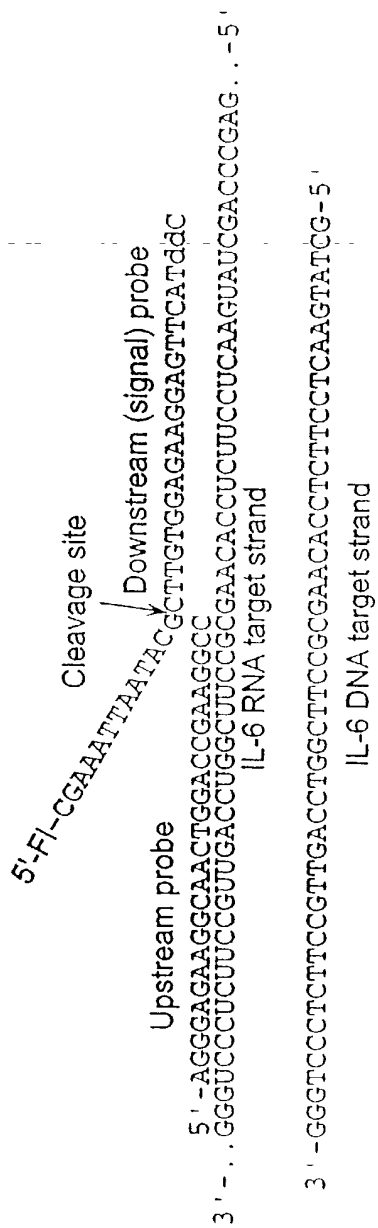
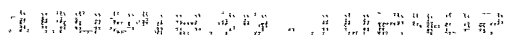


FIGURE 10



DNA

B

RNA

FIGURE 11

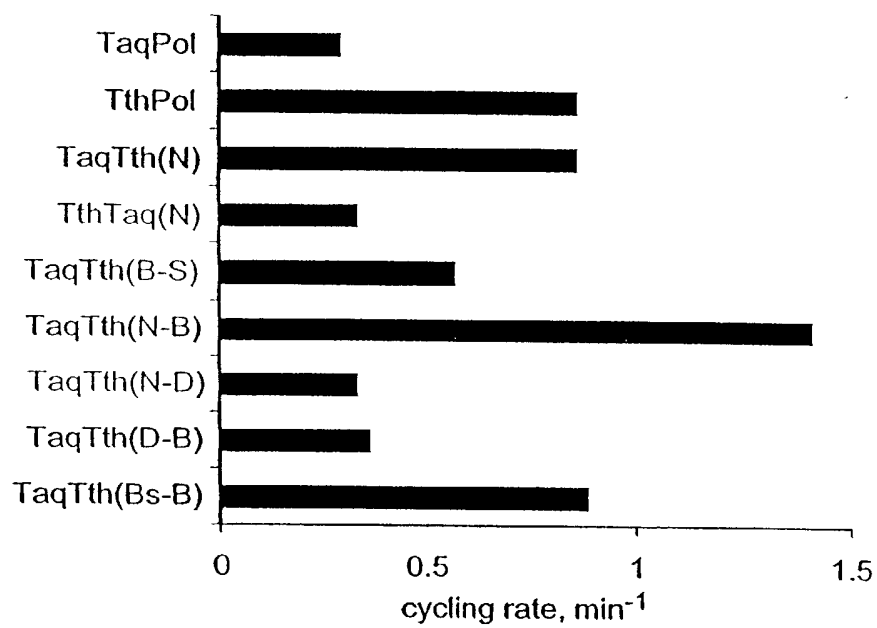


FIGURE 12



	BstBI (382)		NdeI (443)					
1 TaqPol	390	400	410	420	430	440	450	460
2 TthPol	DPSNTTPEGVARRYGGEWTEEAAGRAALSERLNNLWRRLEGEERLLWLYREVERPLSIVLAHMEATGVREEDVAYLQALS	DPSNTTPEGVARRYGGEWTEEAAGRAALSERLNNLWRRLEGEERLLWLYREVERPLSIVLAHMEATGVREEDVAYLQALS	DPSNTTPEGVARRYGGEWTEEAAGRAALSERLNNLWRRLEGEERLLWLYREVERPLSIVLAHMEATGVREEDVAYLQALS	DPSNTTPEGVARRYGGEWTEEAAGRAALSERLNNLWRRLEGEERLLWLYREVERPLSIVLAHMEATGVREEDVAYLQALS	DPSNTTPEGVARRYGGEWTEEAAGRAALSERLNNLWRRLEGEERLLWLYREVERPLSIVLAHMEATGVREEDVAYLQALS	DPSNTTPEGVARRYGGEWTEEAAGRAALSERLNNLWRRLEGEERLLWLYREVERPLSIVLAHMEATGVREEDVAYLQALS	DPSNTTPEGVARRYGGEWTEEAAGRAALSERLNNLWRRLEGEERLLWLYREVERPLSIVLAHMEATGVREEDVAYLQALS	DPSNTTPEGVARRYGGEWTEEAAGRAALSERLNNLWRRLEGEERLLWLYREVERPLSIVLAHMEATGVREEDVAYLQALS
1 TaqPol	470	480	490	500	510	520	530	540
2 TthPol	LEVAEEIIRLEAEVFRRLAGHPFNLSRDQLERVLDELPLPAIGKTKTKGKRSTSAAVLEALREAHPIVEKILQVRELTK	LEVAEEIIRLEAEVFRRLAGHPFNLSRDQLERVLDELPLPAIGKTKTKGKRSTSAAVLEALREAHPIVEKILQVRELTK	LEVAEEIIRLEAEVFRRLAGHPFNLSRDQLERVLDELPLPAIGKTKTKGKRSTSAAVLEALREAHPIVEKILQVRELTK	LEVAEEIIRLEAEVFRRLAGHPFNLSRDQLERVLDELPLPAIGKTKTKGKRSTSAAVLEALREAHPIVEKILQVRELTK	LEVAEEIIRLEAEVFRRLAGHPFNLSRDQLERVLDELPLPAIGKTKTKGKRSTSAAVLEALREAHPIVEKILQVRELTK	LEVAEEIIRLEAEVFRRLAGHPFNLSRDQLERVLDELPLPAIGKTKTKGKRSTSAAVLEALREAHPIVEKILQVRELTK	LEVAEEIIRLEAEVFRRLAGHPFNLSRDQLERVLDELPLPAIGKTKTKGKRSTSAAVLEALREAHPIVEKILQVRELTK	LEVAEEIIRLEAEVFRRLAGHPFNLSRDQLERVLDELPLPAIGKTKTKGKRSTSAAVLEALREAHPIVEKILQVRELTK
1 TaqPol	550	560	570	580	590			
2 TthPol	LKSTYIDPLPLIHPRTGRLHTRFNQTATATGRLSSSDPNLQNIPIVPTPLGQRI	LKSTYIDPLPLIHPRTGRLHTRFNQTATATGRLSSSDPNLQNIPIVPTPLGQRI	LKSTYIDPLPLIHPRTGRLHTRFNQTATATGRLSSSDPNLQNIPIVPTPLGQRI	LKSTYIDPLPLIHPRTGRLHTRFNQTATATGRLSSSDPNLQNIPIVPTPLGQRI	LKSTYIDPLPLIHPRTGRLHTRFNQTATATGRLSSSDPNLQNIPIVPTPLGQRI	LKSTYIDPLPLIHPRTGRLHTRFNQTATATGRLSSSDPNLQNIPIVPTPLGQRI	LKSTYIDPLPLIHPRTGRLHTRFNQTATATGRLSSSDPNLQNIPIVPTPLGQRI	LKSTYIDPLPLIHPRTGRLHTRFNQTATATGRLSSSDPNLQNIPIVPTPLGQRI

FIGURE 13

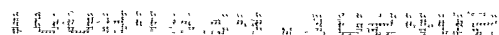


FIGURE 14

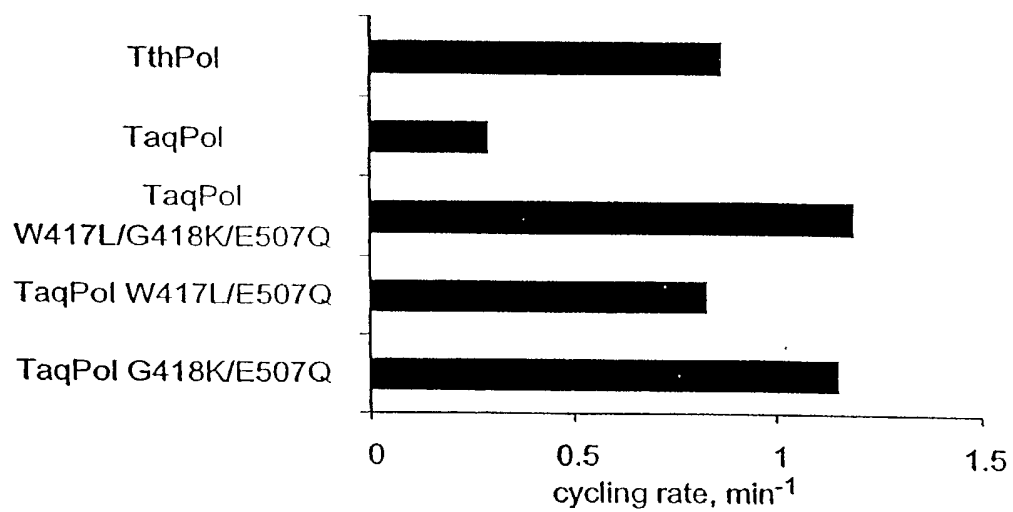


FIGURE 15





2002-10-24 10:00:00





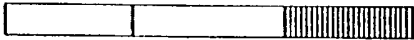
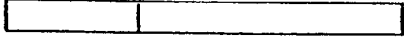
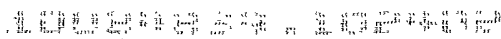
		Polymerase Activity Assays	
		% Fl-labeled dUTP incorporated	
		<u>RNA, p(A) or DNA, p(dA) Template</u>	
Nuclease Domain	Polymerase Domain		
Tth		5.8 (1.00)	14.8 (1.00)
Taq		0.8 (0.14)	15.0 (1.01)
TaqTth(N)		4.88 (0.84)	12.9 (0.87)
TaqTth(N-B)		0.58 (0.10)	13.3 (0.90)
TaqTth(B-S)		6.60 (1.14)	14.9 (1.01)
Taq(W417L/G418K/E507Q)		0.42 (0.07)	12.6 (0.85)

FIGURE 16



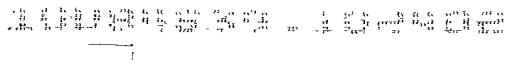


FIGURE 18A

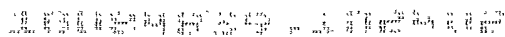


FIGURE 18B

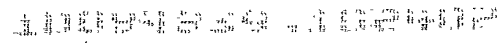


FIGURE 18C

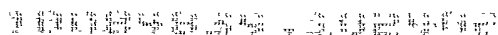
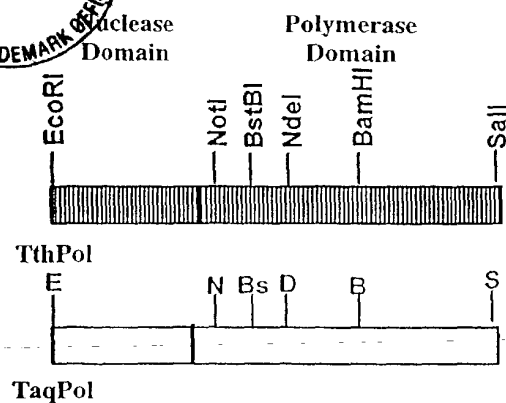
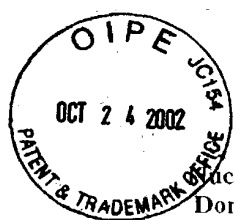


FIGURE 18D



	Turnover Rate (1/min) (Relative Rate)		
	IL-6 RNA Invader Assay	Synthetic r25mer Invader Assay	Synthetic IrT1 Invader Assay
TthPol	0.86 (1.00)	0.29 (1.00)	1.85 (1.00)
TaqPol	0.29 (0.32)	0.03 (0.10)	0.05 (0.03)
TaqTth(N)	0.86 (1.00)	0.45 (1.56)	3.36 (1.81)
TthTaq(N)	0.33 (0.38)	0.03 (0.10)	0.00 (0.00)
TaqTth(B-S)	0.57 (0.67)	0.07 (0.23)	0.15 (0.08)
TthTaq(B-S)	0.70 (0.79)	0.30 (1.05)	1.70 (0.92)
TaqTth(N-B)	1.41 (1.59)	0.40 (1.38)	3.22 (1.74)
TthTaq(N-B)	0.22 (0.25)	0.05 (0.18)	0.05 (0.03)
TaqTth(N-Bs)	0.22 (0.25)	0.10 (0.11)	0.06 (0.03)
TaqTth(Bs-B)	0.89 (1.04)	0.18 (0.63)	0.71 (0.38)
TaqTth(N-D)	0.33 (0.38)	0.08 (0.29)	0.18 (0.10)
TaqTth(D-B)	0.32 (0.42)	0.16 (0.54)	0.16 (0.09)

FIGURE 19

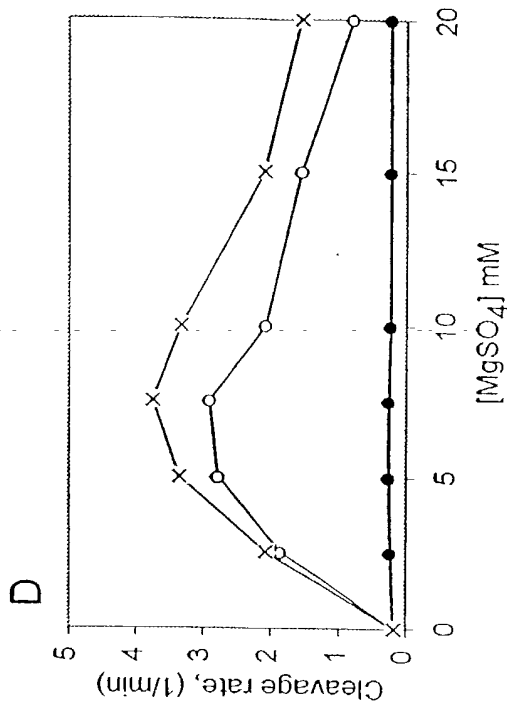
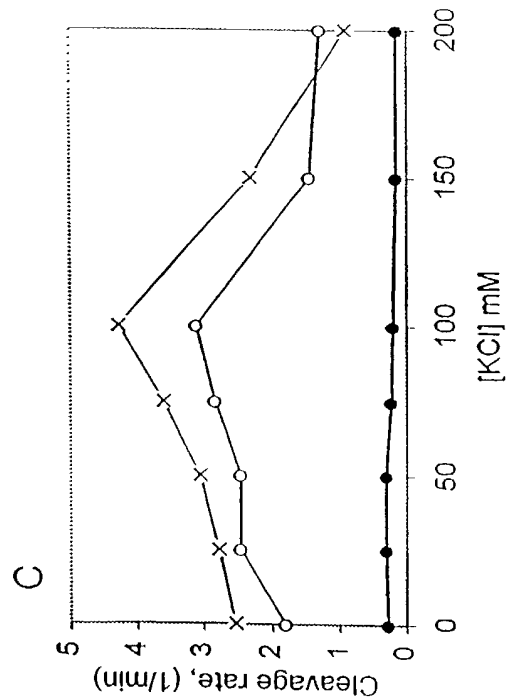
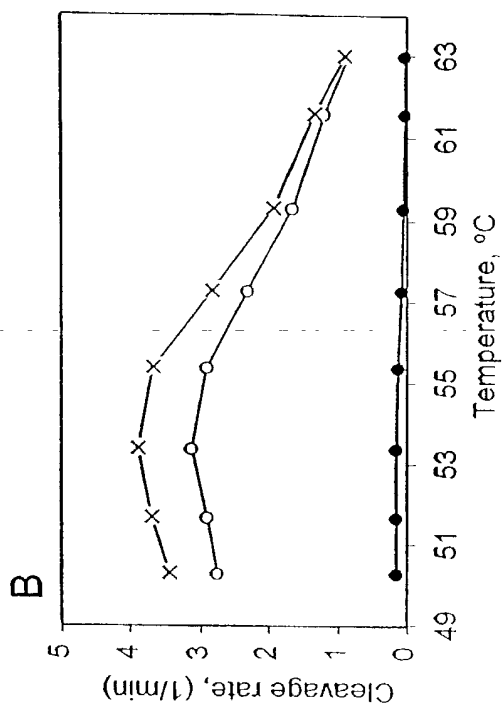
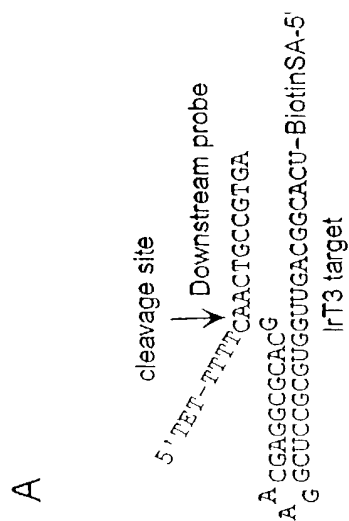


FIGURE 20





3 031544 391 1 0125072

## FIGURE 21

A

5'-tet-TTTTCAACTGCCGTGA  
A CGAGGCGCACG  
A GCTCCGCGTGGTTGACGGCACT

B

5'-tet-TTTTCAACTGCCGTGA  
A CGAGGCGCACG  
A GCUCCGCGUGGUUGACGGCACU-BiotinSA-5'



10094454 . 002402

## FIGURE 22

A

(SEQ ID NO: 230)



3' NH4-AATTGCTCCGCGTGGTTGACGAAGGAGGC-5'

5'-F1-TCCTTCT CAACTGCTTCCTCCG-3'



(SEQ ID NO: 231)

B

(SEQ ID NO: 232)



5'-AACGAGGCGCACCTCAAATCTCCCTT-biotin

3' NH4-AATTGCTCCGCGTGGTTGACGAAGGAGGC-5'

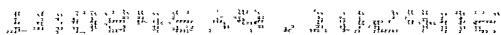
(SEQ ID NO 230)



5'-F1-TCCTTCT CAACTGCTTCCTCCG-3'



(SEQ ID NO: 231)



(SEQ ID NO: 235) (SEQ ID NO:234)  
 ↓ ↓  
 5' -ACGAGCGTCTTT<sup>G</sup>CGCTGTCTCGCT  
 TTGCTCGCAGAAA — GCGACAGAGCGA-F1-5'  
↑  
(SEQ ID NO:233)

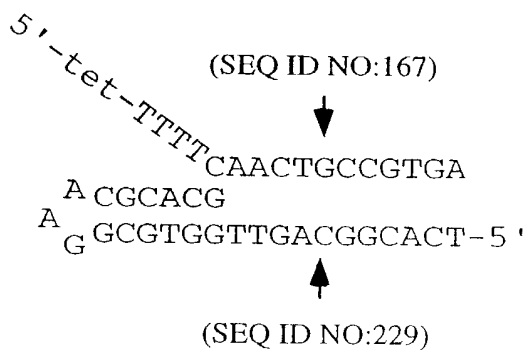


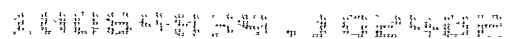
## FIGURE 24

A



B





Enzyme	Concentration	Turnover (min <sup>-1</sup> )
TthDN	10ng	0.32
TthDN	20ng	0.53
Taq2M	10ng	0.43
Taq2M	20ng	0.60
Tfi	10ng	0.02
Tfi	20ng	0.04
Tfi2M	10ng	0.07
Tfi2M	20ng	0.11
Tsc	10ng	0.03
Tsc	20ng	0.04
Tsc2M	10ng	0.07
Tsc2M	20ng	0.11

**a**

CGAACTGCCCCCTTTCGGCCGCTTGCACCGCTCTTTCCCTTCCCTTCTTTTCGCTT

M13mp18

5' 3'

**b**

81-69-5

5' GCTTGACGGGGAAAGCCGGCGAACGTGGCG

CGAACTGCCCCCTTTCGGCCGCTTGCACCGCTCTTTCCCTTCCCTTCTTTTCGCTT

M13mp18

5' 3'

**c**

81-69-4

5' CTTGACGGGGAAAGCCGGCGAACGTGGCGA

CGAACTGCCCCCTTTCGGCCGCTTGCACCGCTCTTTCCCTTCCCTTCTTTTCGCTT

M13mp18

5' 3'

**d**

81-69-3

5' TGACGGGGAAAGCCGGCGAACGTGGCGGAGA

CGAACTGCCCCCTTTCGGCCGCTTGCACCGCTCTTTCCCTTCCCTTCTTTTCGCTT

M13mp18

5' 3'

**e**

81-69-2

5' ACGGGGAAAGCCGGCGAACGTGGCGAGAAA

CGAACTGCCCCCTTTCGGCCGCTTGCACCGCTCTTTCCCTTCCCTTCTTTTCGCTT

M13mp18

5' 3'



1001041532, 1001041533

FIGURE 27

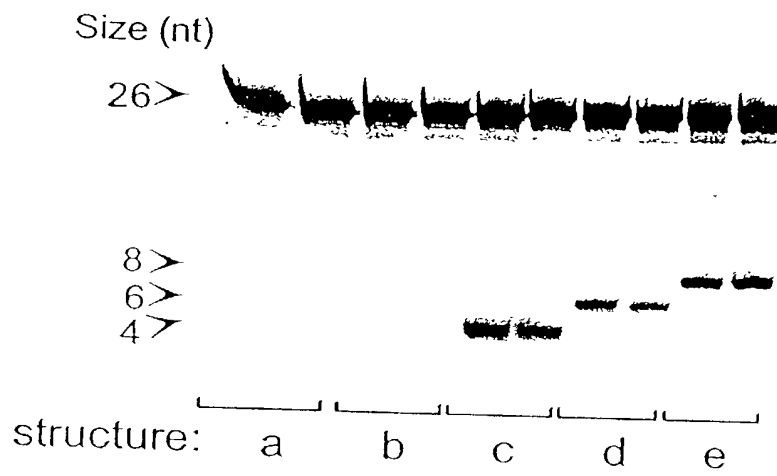
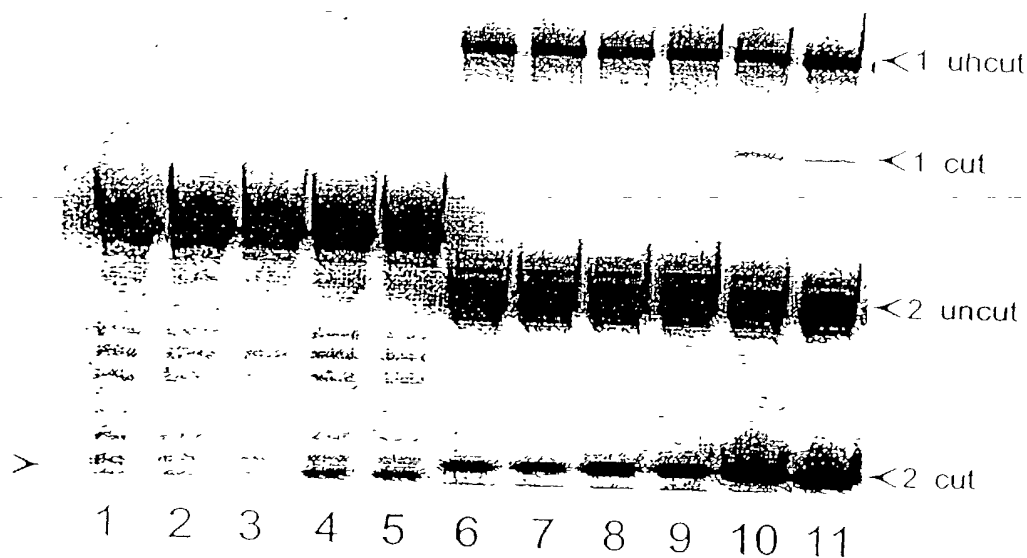




FIGURE 28

a



b

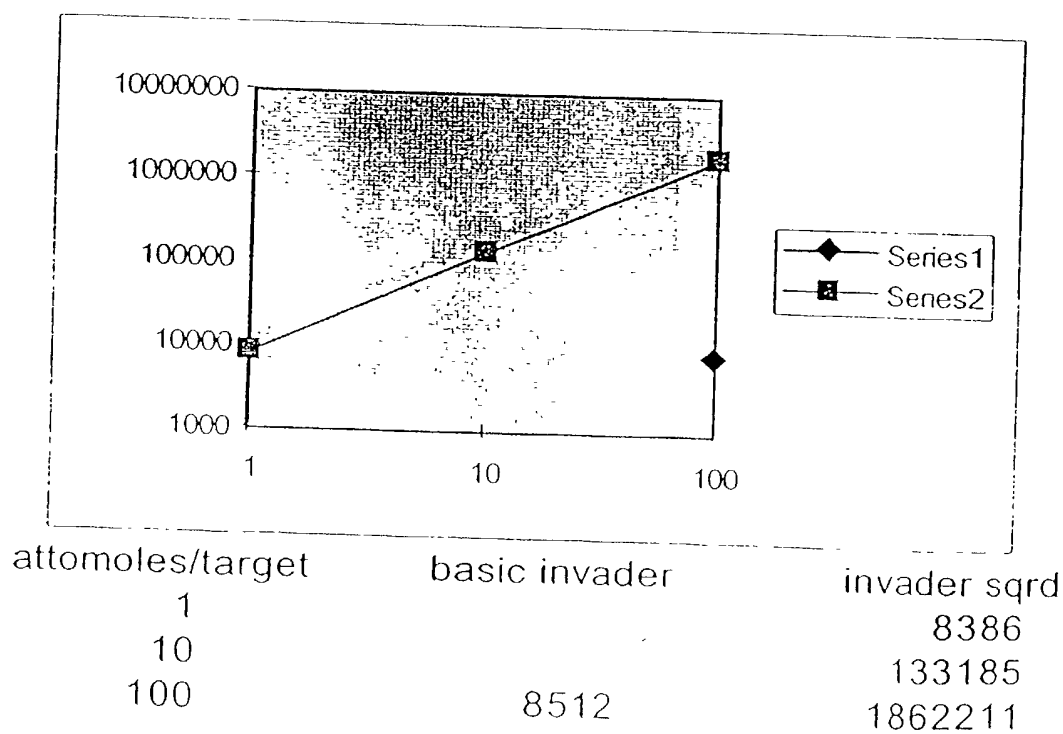






FIGURE 29

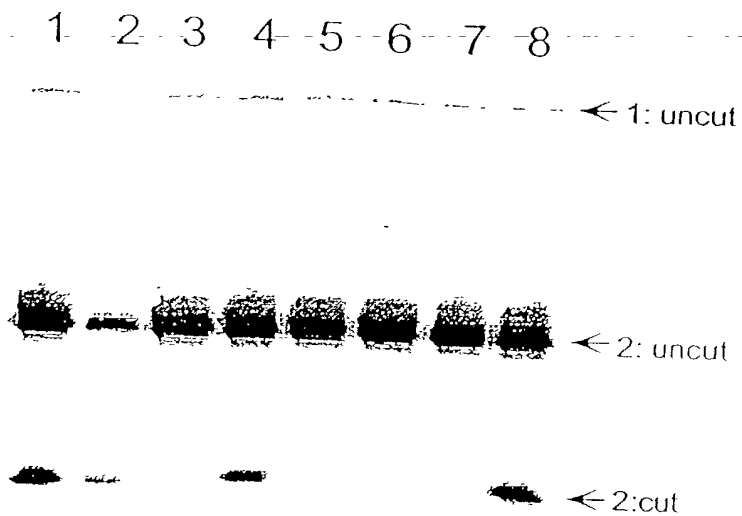




FIGURE 30

Cleavage  
 site  
 5'  $\overline{FL-ITT}$   $\overline{Y}$   $\overline{CCCTCCTCCTCTCTCC-3'}$   
 89-44 89-76  
 5' ACACAGTGTCCTCCCGCTCCTCCTGAGCA  
 3'-ACTGTCTGTCAAGAGGCGGAGGACTCGTGGAGGAGGAGGAGTA-5'  
 3110 3057  
 HCMV Target Sequence



FIGURE 31

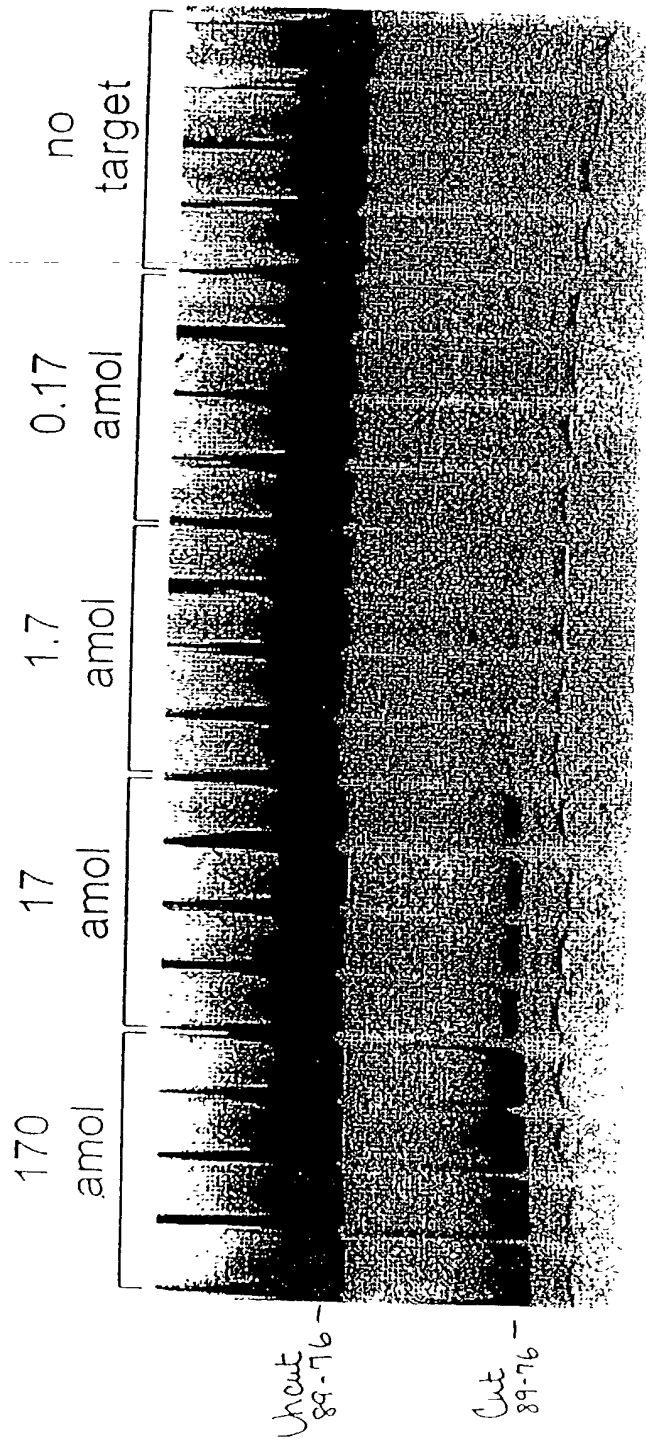
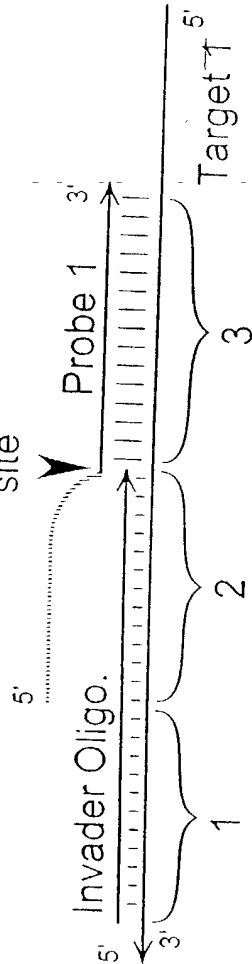


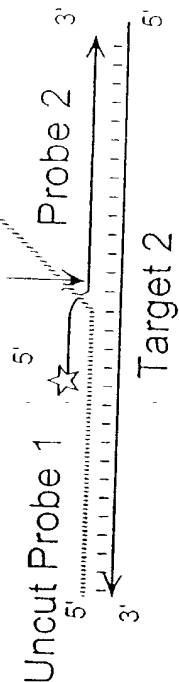
FIGURE 32

Cleavage site



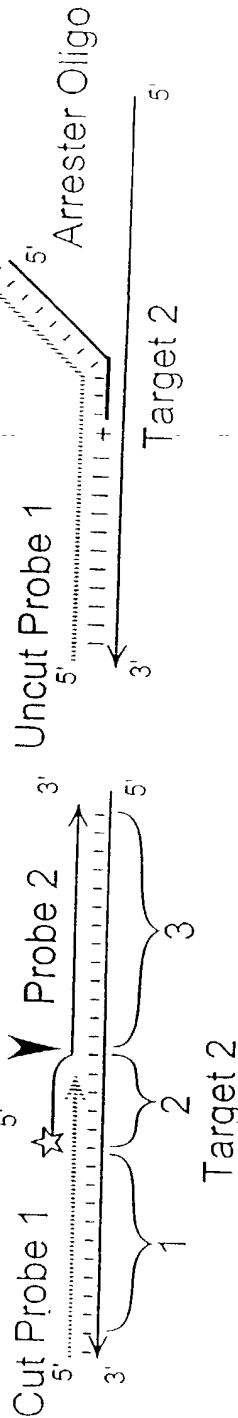
1

Background cleavage site



2a

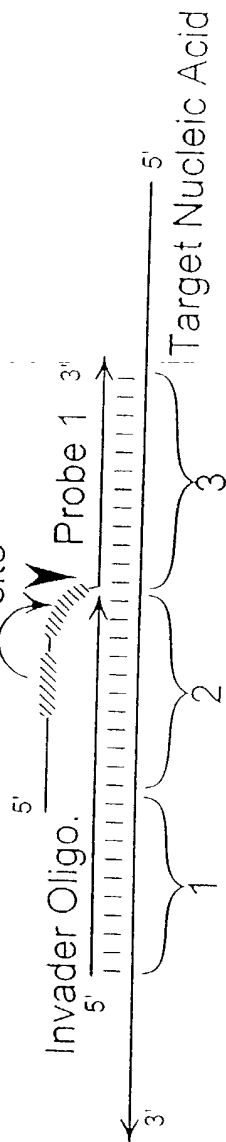
Cleavage site



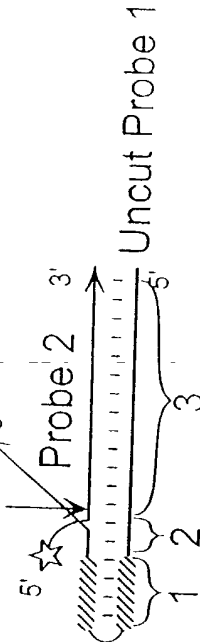
2b

FIGURE 33

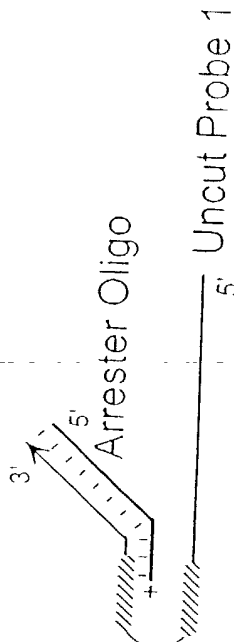
Cleavage site

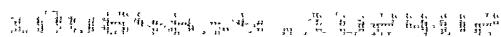


Background cleavage site



Cleavage site





1 2 3 4 5 6 7 8 9 10

C



FIGURE 35A

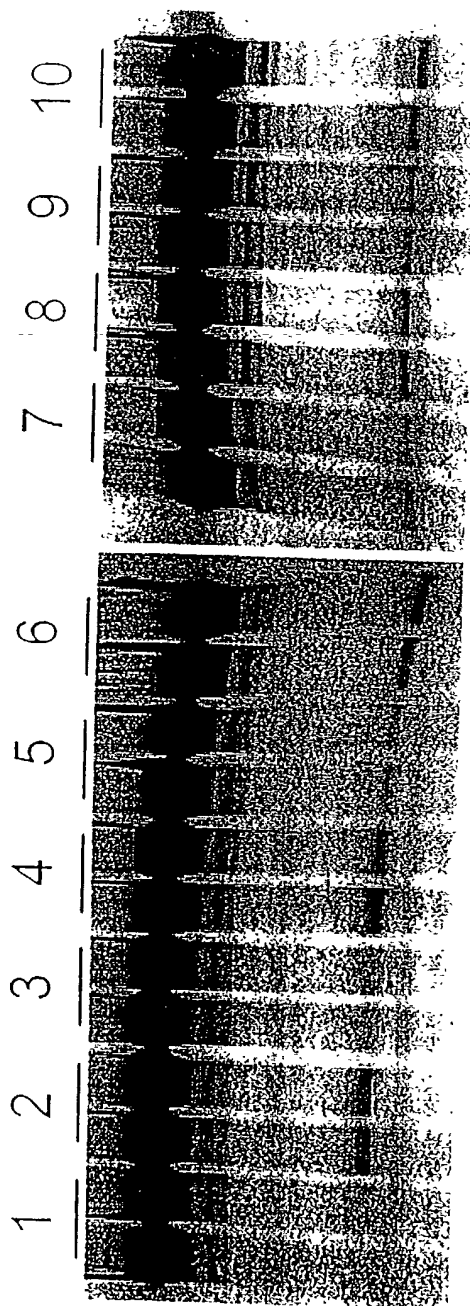
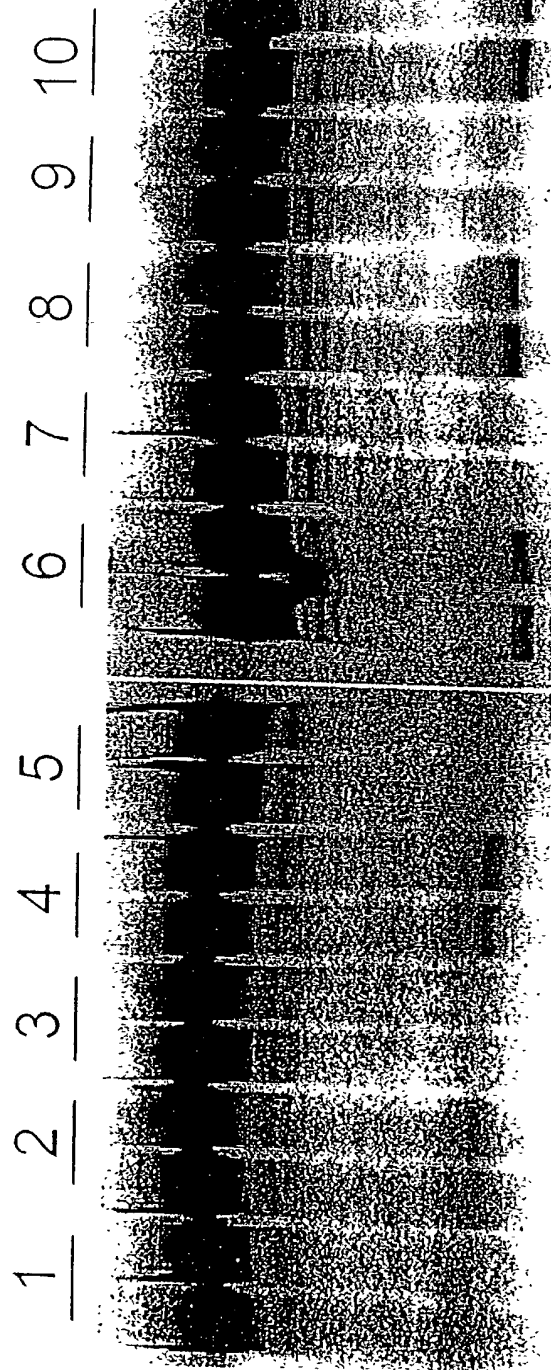




FIGURE 35B



11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100



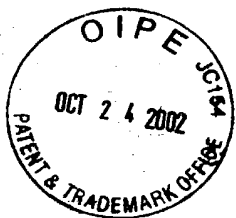
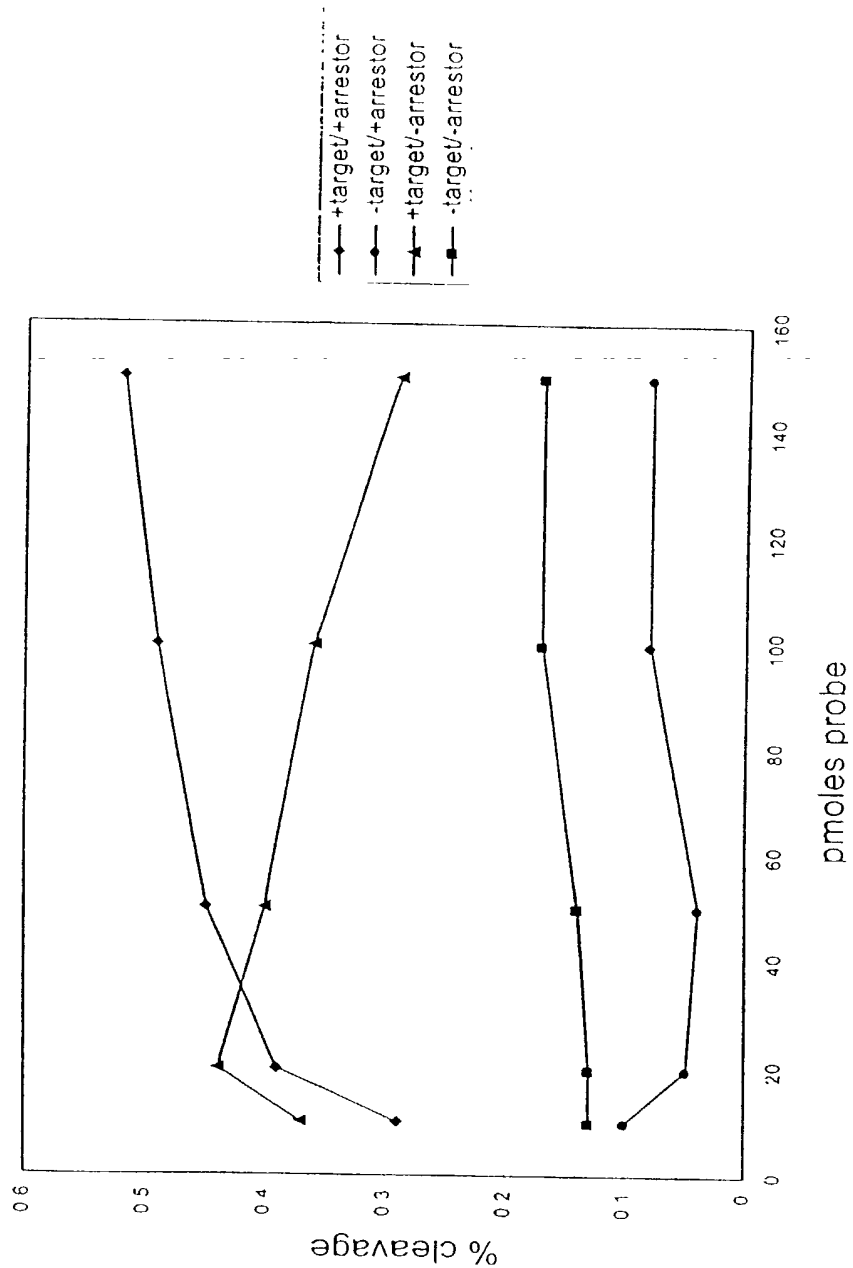
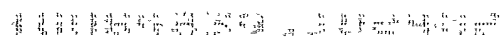


FIGURE 35C







JUN 19 4 53 PM '02

FIGURE 36B

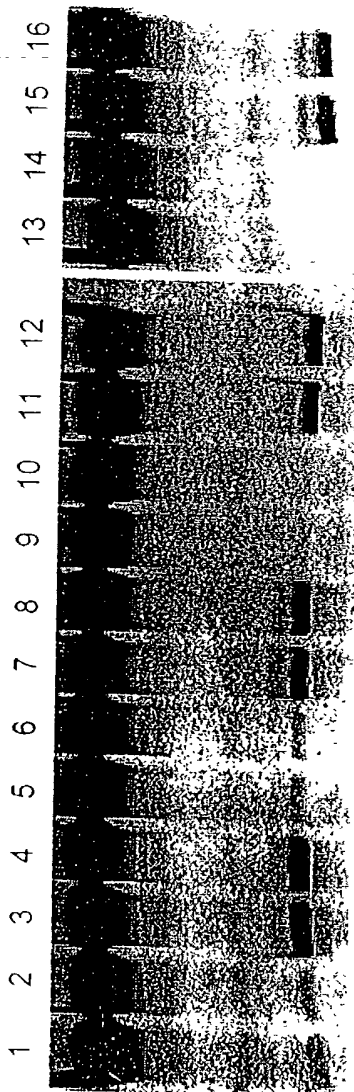
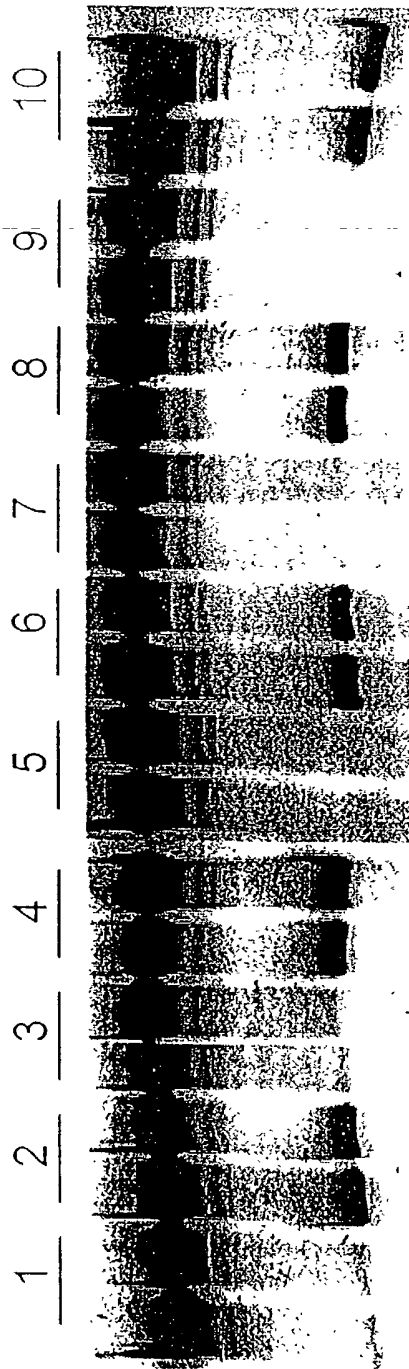
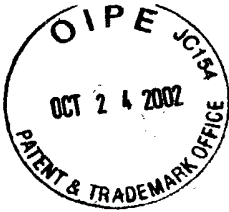


FIGURE 37A

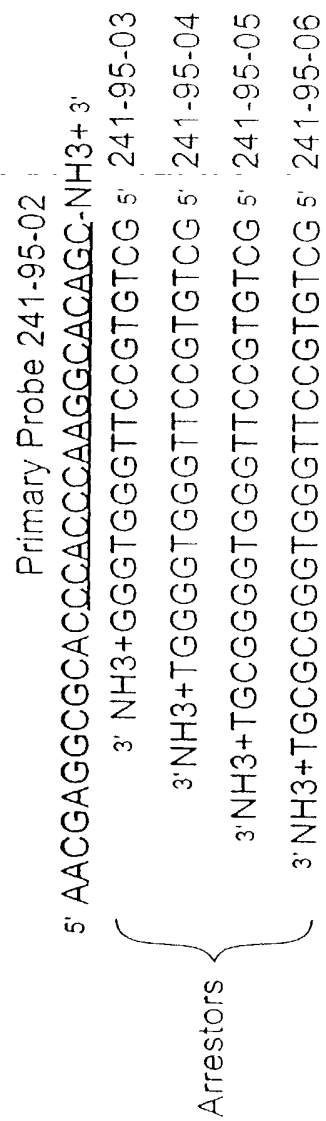


1000 900 800 700 600 500 400 300 200 100





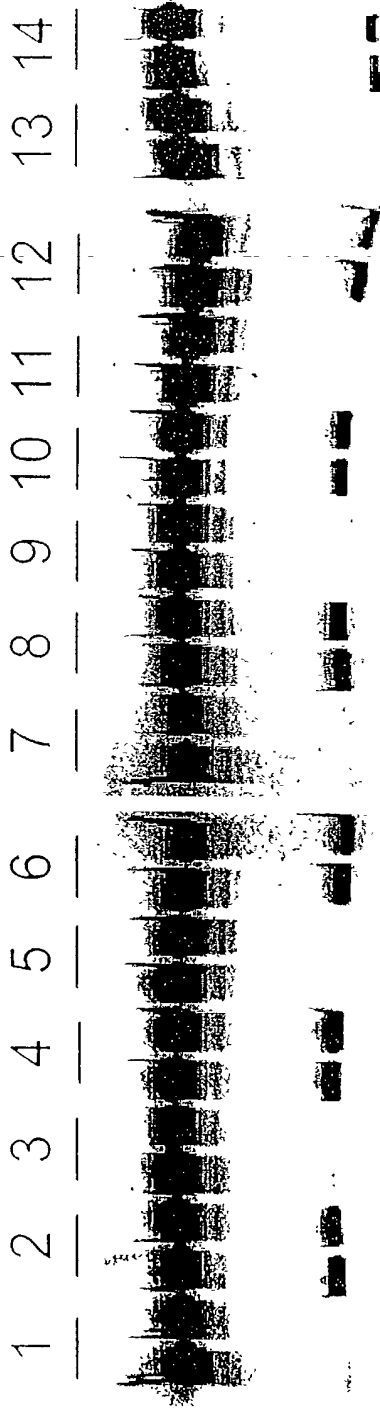
**FIGURE 37C**

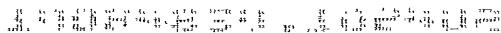




XXXXXXXXXX XXXXXXXX

FIGURE 38





—

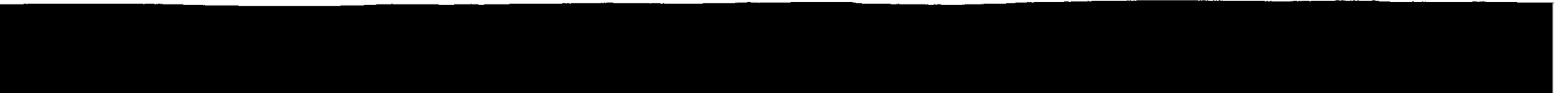
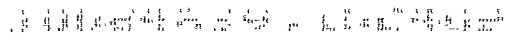






FIGURE 40

	1	2	3	4	5	6	7	8	9	10	11	12
A	Negative Control	No Target Control	Sample 1	Sample 1	Sample 9	Sample 9	Sample 17	Sample 17	Sample 25	Sample 25	Sample 33	Sample 33
B	No Target Control	No Target Control	Sample 2	Sample 2	Sample 10	Sample 10	Sample 18	Sample 18	Sample 26	Sample 26	Sample 34	Sample 34
C	Standard 1	Standard 1	Sample 3	Sample 3	Sample 11	Sample 11	Sample 19	Sample 19	Sample 27	Sample 27	Sample 35	Sample 35
D	Standard 2	Standard 2	Sample 4	Sample 4	Sample 12	Sample 12	Sample 20	Sample 20	Sample 28	Sample 28	Sample 36	Sample 36
E	Standard 3	Standard 3	Sample 5	Sample 5	Sample 13	Sample 13	Sample 21	Sample 21	Sample 29	Sample 29	Sample 37	Sample 37
F	Standard 4	Standard 4	Sample 6	Sample 6	Sample 14	Sample 14	Sample 22	Sample 22	Sample 30	Sample 30	Sample 38	Sample 38
G	Standard 5	Standard 5	Sample 7	Sample 7	Sample 15	Sample 15	Sample 23	Sample 23	Sample 31	Sample 31	Sample 39	Sample 39
H	Standard 6	Standard 6	Sample 8	Sample 8	Sample 16	Sample 16	Sample 24	Sample 24	Sample 32	Sample 32	Sample 40	Sample 40



\_\_\_\_\_

\_\_\_\_\_

5' -CGC CGA GAT CAC CTT TAC ATT TTC TAT CGT NH<sub>2</sub>-3' (SEQ ID NO:169)  
 5' -CCT TCC TTA TCC TGG ATC TTG GCA -3' (SEQ ID NO:170)  
 5' -ACG ATA GAA AAT GTA AAG GTG ATC-3' (SEQ ID NO:171)  
 5'-RED-CTC (Z28) TTC TCA GTG CG-3' (SEQ ID NO:172)  
 5'-CGC AGT GAG AAT GAG GTG ATC TCG GCG GT-3' (SEQ ID NO:173)

Primary probe	5'-CCG CCG AGA TCA CGG ATG TTG TAA TCA GAG A-NH2-3'	(SEQ ID NO:174)
INVADER oligonucleotide 1	5'-GTG CAG GGT TGA CTC CTT CTC-3'	(SEQ ID NO:175)
INVADER oligonucleotide 2	5'-GTG CAG GGT TGA CTC TTT CTC-3'	(SEQ ID NO:176)
INVADER oligonucleotide 3	5'-GTG CAG GGT CGA CTC TTT CTC-3'	(SEQ ID NO:177)
ARRESTOR oligonucleotide	<b>5'-TCT CTG ATT ACA ACA TCC GTG ATC T-3'</b>	(SEQ ID NO:178)
FRET Probe	5'-RED-CTC (Z28) TTC TCA GTG CG-3'	(SEQ ID NO:172)
Secondary target	5'-CGC AGT GAG AAT GAG GTG ATC TCG GCG GT-3'	(SEQ ID NO:173)

Primary probe	(SEQ ID NO:179)
INVADER oligonucleotide	5'-CGC CGA GAT CAC GTA GTT GAG GTC AAT GA-NH <sub>2</sub> -3'
ARRESTOR oligonucleotide	5'-GAA TCA TAC TGG AAC ATG TAG ACC ATC-3'
FRET Probe	5'-TCA TTG ACC TCA ACT ACG TGA TCT-3'
Secondary target	5'-RED-CTC (Z28) TTC TCA GTG CG-3'
	5'-CGC AGT GAG AAT GAG GTG ATC TCG GCG GT-3'
	(SEQ ID NO:172)
	(SEQ ID NO:173)

Primary probe	5'-CCG CCG AGA TCA CGA TGA TCT TGA GGC T-NH2-3'	(SEQ ID NO:182)
INVADER oligonucleotide	5'-TGG TGC AGG AGG CAT TGC TC-3'	(SEQ ID NO:183)
ARRESTOR oligonucleotide	<b>5'-CGC CCT CAA GAT TAC CGT GAT CT-3'</b>	(SEQ ID NO:184)
FRET Probe	5'-RED-CTC (Z28) TTC TCA GTG CG-3'	(SEQ ID NO:172)
Secondary target	5'-CGC AGT GAG AAT GAG GTG ATC TCG GCG <b>GT-3'</b>	(SEQ ID NO:173)

### hTGF- $\beta$

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC CTC CAC GGC TC -3'  
5'-AGG CGA AAG CCC TCA ATT TCC CA-3'  
5'-AAC CAC TGC CGC ACA-3'  
5'-GAG CCG TGG AGG AGG CG-3'  
5'-FL-CAC-(Z28)-TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:185)  
(SEQ ID NO:186)  
(SEQ ID NO:187)  
(SEQ ID NO:188)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

### hMCP-1

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC CTT CGG AGT TTG GG NH2 -3"  
5'-GGG TTG TGG AGT GAG TGT TCA AGT A -3'  
NO STACKER  
5'-GGG-AAA-CTC-CGA-AGG-AGG-CG-3'  
5'-FL-CAC-Z28-TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:191)  
(SEQ ID NO:192)  
(SEQ ID NO:193)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

### hTNF- $\alpha$

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC TCT GAC TGC CA NH2-3'  
5'-TTG TCA CTC GGG GTT CGA GAA GAT GAA-3'  
5'-GGG CCA GAG GG-3'  
5'-AGG CAG TCA GAG AGG CG-3'  
5'-FL-CAC-Z28-TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:194)  
(SEQ ID NO:195)  
(SEQ ID NO:196)  
(SEQ ID NO:197)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

### hIL-6

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC CTC ATT GAA TTNH2-3'  
5'-CCA AAA GTC CAG TGA TTT TCA CCA GGC AAG TA -3'  
5'-CAG ATT GGA AGC ATC CAT CT-3'  
5'-GAT TCA ATG AGG AGG AGG C-3'  
5'-FL-CAC-(Z28)-TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:198)  
(SEQ ID NO:199)  
(SEQ ID NO:200)  
(SEQ ID NO:201)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

Patent & Trademark Office





hIL-1β

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC CAT CTG TTT AGG NH2-3'  
5'-CAG GTC CTG GAA GGA GCA CTT A-3'  
5'-GCC ATC AGC TTC TTT GTT CTT GTC ATC-3'  
5'-GCC CTA AAC AGA TGG AGG CG-3'  
5'-FL-CAC-(Z28)-TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:202)  
(SEQ ID NO:203)  
(SEQ ID NO:204)  
(SEQ ID NO:205)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

hIL-2

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC CTC CAG TTG TAG NH2-3'  
5'-AAA ATC ATC TGT AAA TCC AGC AGT AAA TGA-3'  
5'-CTG TGT TTT CTT TGT AGA AC-3'  
5'-CTA CAA CTG GAG GAG GC-3'  
5'-FL-CAC-(Z28)-TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:206)  
(SEQ ID NO:207)  
(SEQ ID NO:208)  
(SEQ ID NO:209)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

hIL-8

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC CTC TCA GTT CT-NH2-3'  
5'-GTG TGG TCC ACT CTC AAT CAA-3'  
5'-TTG ATA AAT TTG GGG TGG AAA GGT TTG GA-3'  
5'-AGA ACT GAG AGG AGG CG-3'  
5'-FL-CAC-(Z28)-TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:210)  
(SEQ ID NO:211)  
(SEQ ID NO:619)  
(SEQ ID NO:620)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

hIL-10

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-AAC GAG GCG CAC CAA ACT CAC TCA T-NH2-3'  
5'-GTC ATG TAG GCT TCT ATG TAG TTG ATG AAG ATG TA-3'  
5'-GGC TTT GTA GAT GCC TTT CTC TTG GA-3'  
5'-ATG AGT GAG TTT GGT GCG-3'  
5'-FL-CAC-(Z28)-TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:621)  
(SEQ ID NO:622)  
(SEQ ID NO:623)  
(SEQ ID NO:624)  
(SEQ ID NO:189)  
(SEQ ID NO:625)

hIL-1β  
hIL-2  
hIL-8  
hIL-10



#### hIL-4

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-AAC GAG GCG CAC CTT GGA GCC A-NH<sub>2</sub>-3'  
5'-AAG GTT TCC TTC TCA GTT GTG TTA-3'  
5'-GCA AAG ATG TCT GTT ACG GTC AAC TC-3'  
5'-TGC CTC CAA GGT GCG C-3'  
5'-FL-CAC (Z28)-TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:626)  
(SEQ ID NO:627)  
(SEQ ID NO:628)  
(SEQ ID NO:629)  
(SEQ ID NO:189)  
(SEQ ID NO:625)

#### hIFN- $\gamma$

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-AAC GAG GCG CAC CTT CAA AAT GCC TAA-NH<sub>2</sub>-3'  
5'-TGT CAC TCT CCT CTT TCC AAT TA-3'  
5'-GAA AAG AGT TCC ATT ATC CGC TAC ATC TG-3'  
5'-TTA GGC ATT TTG AAG GTG CGC-3'  
5'-FL-CAC (Z28)-TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:630)  
(SEQ ID NO:631)  
(SEQ ID NO:632)  
(SEQ ID NO:633)  
(SEQ ID NO:189)  
(SEQ ID NO:625)

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100.

### hCYP 1A2, 1193G

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-AAC GAG GCG CAC CGT TGT GTC CC-NH2-3'  
5'-GGG ATG TAG AAG CCA TTC AGA-3'  
5'-TTG TTG TGC TGT GGG GGA TG-3'  
5'-GGG ACA CAA CGG TGC GC-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:634)  
(SEQ ID NO:635)  
(SEQ ID NO:636)  
(SEQ ID NO:637)  
(SEQ ID NO:189)  
(SEQ ID NO:625)

### hCYP 2B6, 343G

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC CAC CAT ATC CC-NH2-3'  
5'-CCA GCG GTT TCC ATT GGC AAA GAT CAA-3'  
5'-CGG AAG AAT GGG TCG ACC ATG-3'  
5'-GGG ATA TGG TGG AGG CG-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:638)  
(SEQ ID NO:639)  
(SEQ ID NO:640)  
(SEQ ID NO:641)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

### hCYP 2C19, 223G

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-AAC GAG GCG CAC CGT TCC AGG C-NH2-3'  
5'-CAT ATC CAT GCA GCA CCA CCA TGA-3'  
5'-CAA AAT ACA GAG TGA ACA CAG GGC C-3'  
5'-GCC TGG AAC GGT GCG C-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:642)  
(SEQ ID NO:643)  
(SEQ ID NO:644)  
(SEQ ID NO:645)  
(SEQ ID NO:189)  
(SEQ ID NO:625)

### hCYP 2C9, 1554T

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC ATG GAT AAT GCC C-NH2-3'  
5'-CAG GTG AGA AAA GGC ATT ACA GAT AGT GAA AGC-3'  
5'-CAG AGG AAA GAG AGC TGC AGG G-3'  
5'-GGG CAT TAT CCA TGA GGC G-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:646)  
(SEQ ID NO:647)  
(SEQ ID NO:648)  
(SEQ ID NO:649)  
(SEQ ID NO:189)  
(SEQ ID NO:190)



1193G 343G 223G 1554T



### hCYP 2D6, 1316G

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC CCT GCT GAG AAA-NH2-3'  
5'-CCC GAG GCA TGC ACG GCG GA-3'  
5'-GGC AGG AAG GCC TCC-3'  
5'-TTT CTC AGC AGG GAG GCG-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:650)  
(SEQ ID NO:651)  
(SEQ ID NO:652)  
(SEQ ID NO:653)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

### hCYP 3A4, 309C

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC GCC CCA CA-NH2-3'  
5'-CAG CAC AGG CTG TTG ACC ATC ATA AAA C-3'  
5'-CTT TTC CAT ACT TTT TAT GAC ATT C-3'  
5'-TGT GGG GCG AGG CG-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:654)  
(SEQ ID NO:655)  
(SEQ ID NO:656)  
(SEQ ID NO:657)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

### hCYP 3A5 v2, 323T

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-AAC GAG GCG CAC AGT TGA CCT TC-NH2-3'  
5'-GTG ATG GCC AGC ACA GGG C-3'  
5'-ATA CGT TCC CCA CAT TTT TC-3'  
5'-TGA AGG TCA ACT GTG CGC-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:658)  
(SEQ ID NO:659)  
(SEQ ID NO:660)  
(SEQ ID NO:661)  
(SEQ ID NO:189)  
(SEQ ID NO:625)

### hCYP 3A7, 231C

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-AAC GAG GCG CAC GTC ATA AAT ACC CC-NH2-3'  
5'-GCC AGC ATA GGC TGT TGA CAC-3'  
5'-AGA CTT TTC TAT ACT TTT TAT AAC ATT C-3'  
5'-GGG GTA TTT ATG ACG TGC GC-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:662)  
(SEQ ID NO:663)  
(SEQ ID NO:664)  
(SEQ ID NO:665)  
(SEQ ID NO:189)  
(SEQ ID NO:625)

100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200



### h/rCYP 1A1 (human: 937, rat 863G)

Primary probe  
INVADER oligonucleotide (h)  
INVADER oligonucleotide (r)  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

(SEQ ID NO:666)  
(SEQ ID NO:667)  
(SEQ ID NO:668)  
(SEQ ID NO:669)  
(SEQ ID NO:670)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

5'-CCG TCA CGC CTC CTG TCT GTG AT-NH2-3'  
5'-TCC TGA CAG TGC TCA ATC AGG A-3'  
5'-TCC TGA CAA TGC TCA ATG AGG A-3'  
5'-GTC CCG GAT GTG GCC C-3'  
5'-ATC ACA GAC AGG AGG CG-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

### h/rCYP 1A2 (813C/819C)

Primary probe  
INVADER oligonucleotide (h)  
INVADER oligonucleotide (r)  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

(SEQ ID NO:671)  
(SEQ ID NO:672)  
(SEQ ID NO:673)  
(SEQ ID NO:674)  
(SEQ ID NO:189)  
(SEQ ID NO:625)

5'-AAC GAG GCG CAC GGA CTG TTT TCT GC-NH2-3'  
5'-CTT GTC AAA GTC CTG ATA GTG CTC CTC-3'  
5'-CTT GTT GAA GTC TTG ATA GTG TTC CTC-3'  
5'-GCA GAA AAC AGT CCG TGC GC-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

### rCYP 2B1, 1017T

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

(SEQ ID NO:675)  
(SEQ ID NO:676)  
(SEQ ID NO:677)  
(SEQ ID NO:678)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

5'-CCG TCA CGC CTC ACT GCG GTC AT-NH2-3'  
5'-GTG GAT AAC TGC ATC AGT GTA TGG CAT TTT C-3'  
5'-CAA GGG TTG GTA GCC TGT GTG AGC C-3'  
5'-ATG ACC GCA GTG AGG CG-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

### rCYP 2B2, 162T

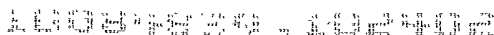
Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

(SEQ ID NO:679)  
(SEQ ID NO:680)  
(SEQ ID NO:681)  
(SEQ ID NO:682)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

5'-CCG TCA CGC CTC AGA GCC AAT CAC-NH2-3'  
5'-CGA TCA TCA AGG GAT GGT GGC CTG TGC-3'  
5'-CTG ATC AAT CTC CTT TTG GAC TTT CTC TGC G-3'  
5'-GTG ATT GGC TCT GAG GCG-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

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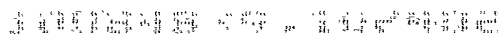


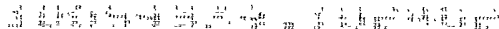


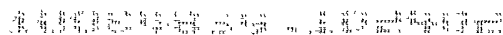
|                          |   |
|--------------------------|---|
| Primary probe            | 5'-AAC GAG GCG CAC TAG GCT TTG CT-NH <sub>2</sub> -3' |
| INVADER oligonucleotide  | 5'-TTC ATG TAG TCA GGG TCA TAG ACA ATT AAG A-3'       |
| Stacker                  | 5'-TCC CCA GAA CCA TCG AGG AAA GG-3'                  |
| ARRESTOR oligonucleotide | 5'-AGC AAA GCC TAG TGC GC-3'                          |
| FRET Probe               | 5'-FL-CAC (Z28) TGC TTC GTG G-3'                      |
| Secondary target         | 5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'             |





[illegible]

[illegible][illegible]



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Figure 46

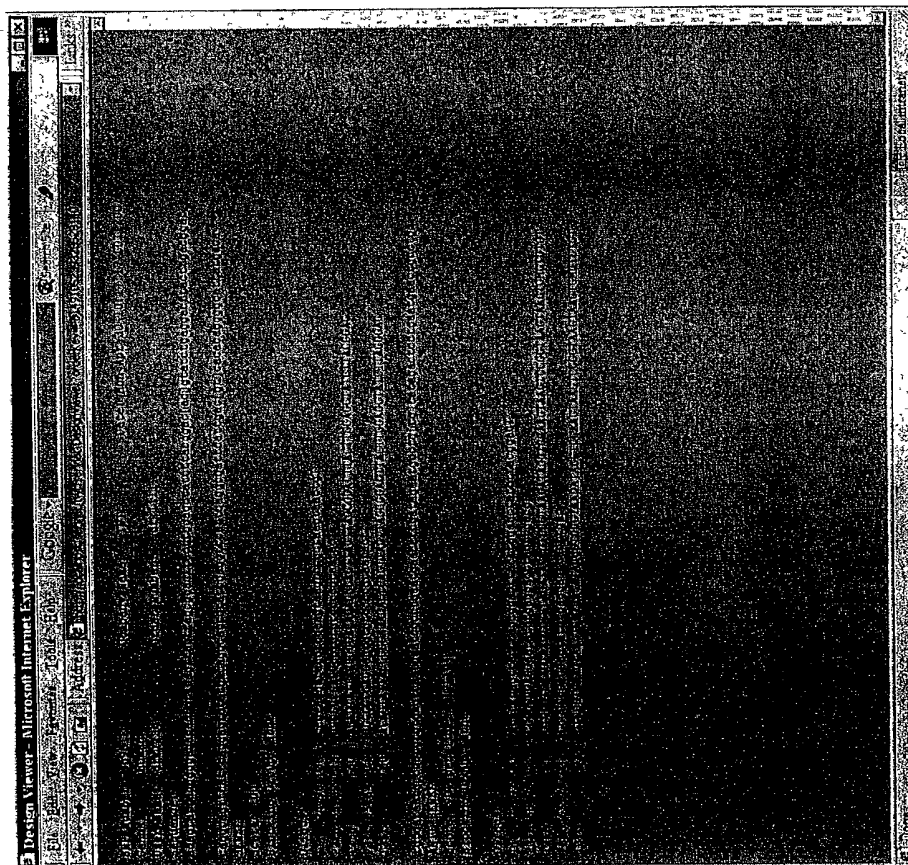




FIGURE 47

Oligo sequence descriptions: 5' to 3' direction, 2'-Ome nts are bolded and underlined, internal modifications defined in ( )

| Oligo Type     | Oligo Sequence (5' to 3')            | Modification          | SEQ ID NO |
|----------------|--------------------------------------|-----------------------|-----------|
| hTNF- $\alpha$ |                                      |                       |           |
| probe          | ccg ccg aga tca ctc tga ctg cct NH2  | 3' Amine              | 709       |
| invader        | tig tca ctc ggg gtt cga gaa gat gaa  |                       | 710       |
| stacker        | ggg cca gag ggc tga tta g            | all 2'Ome bases       | 711       |
| stacker        | ggg cca gag ggc tga tta              | all 2'Ome bases       | 712       |
| stacker        | ggg cca gag ggc tga at               | all 2'Ome bases       | 713       |
| stacker        | ggg cca gag ggc tga t                | all 2'Ome bases       | 714       |
| stacker        | ggg cca gag ggc t                    | all 2'Ome bases       | 715       |
| stacker        | ggg cca gag gg                       | all 2'Ome bases       | 716       |
| arrestor       | agg cag tca gag tga tc               | all 2'Ome bases       | 717       |
| arrestor       | agg cag tca gag tga tct c            | all 2'Ome bases       | 718       |
| SRT            | cggagaagcagtggtggtatctcgccggnh2      | all 2'Ome bases       | 719       |
| FRET probe     | Fcaac(Cy3)gcttctccg                  | 3' Amine              | 720       |
| probe          | ccg tca cgc ctc tct gac tgc ct NH2   | 3' Amine              | 721       |
| invader        | tig tca ctc ggg gtt cga gaa gat gaa  |                       | 722       |
| stacker        | ggg cca gag ggc tga tta g            | all 2'Ome bases       | 723       |
| arrestor       | agg cag tca gag agg cg               | all 2'Ome bases       | 724       |
| SRT            | cggagaagcagtggtggtggtgacggnh2        | 3'base 2'Ome, 3'Amine | 725       |
| FRET probe     | Fcaac(Cy3)gcttctccg                  |                       |           |
| probe          | ccg tca cgc ctc tct gac tgc ctg gNH2 | 3' Amine              | 726       |
| invader        | tig tca ctc ggg gtt cga gaa gat gaa  |                       | 727       |
| arrestor       | cca ggc agt cag aga ggc g            | all 2'Ome bases       | 728       |
| SRT            | cggagaagcagtggtggtggtgacggnh2        | 3'base 2'Ome, 3'Amine | 729       |
| FRET probe     | Fcaac(Cy3)gcttctccg                  |                       | 730       |
| probe          | ccg ccg aga tca ctc tga ctg cc NH2   | 3' Amine              | 731       |
| invader        | tig tca ctc ggg gtt cga gaa gat gaa  |                       | 732       |
| stacker        | tgg gcc aga ggc ctg att a            | all 2'Ome bases       | 733       |
| arrestor       | agg cag tca gag tga tc               | all 2'Ome bases       | 734       |
| SRT            | cggagaagcagtggtggtggtgacggnh2        | 3' Amine              | 735       |
| FRET probe     | Fcaac(Cy3)gcttctccg                  |                       | 736       |
| probe          | ccg ccg aga tca ctg atc tga ctg NH2  | 3' Amine              | 737       |
| invader        | ctt gtc act cgg ggt tgc aga aga c    |                       | 738       |



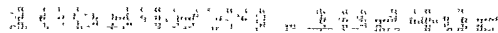


|               |  |                                |     |
|---------------|--|--------------------------------|-----|
| stacker       | cct ggg cca gag ggc tga tt             | all 2'Ome bases                | 739 |
| arrestor      | cag tca gat cag tga tc                 | all 2'Ome bases                | 740 |
| SRT           | cggaagaagcagtggtgatctcgccgNH2          | 3' Amine                       | 741 |
| FRET probe    | Fcaac(Cy3)gcttctcog                    |                                | 742 |
| probe         | cog tca cgc ctc tct gac tgc ca NH2     | 3' Amine                       | 743 |
| probe         | cog tca cgc ctc tct gac tgc cg NH2     | 3' Amine                       | 744 |
| probe         | cog tca cgc ctc tct gac ggc ct NH2     | 3' Amine                       | 745 |
| probe         | cog tca cgc ctc tct gac agc ct NH2     | 3' Amine                       | 746 |
| invader       | ttg tca ctc cgc gtt cga gaa gat gaa    |                                | 747 |
| stacker       | ggg cca gag gg                         | all 2'Ome bases                | 748 |
| arrestor      | agg cag tca gag agg cg                 | all 2'Ome bases                | 749 |
| arrestor      | agg ccg tca gag agg cg                 | all 2'Ome bases                | 750 |
| arrestor      | agg ctg tca gag agg cg                 | all 2'Ome bases                | 751 |
| SRT           | ccaggaagcaagtggaggcgtagcggg            | 3' 3bases 2'Ome                | 752 |
| FRET probe    | Fcaac(Z11)gcttctcog                    |                                | 753 |
| probe         | cog cog aga tca ctc tga tgc ctg gg NH2 | 3' Amine                       | 754 |
| invader       | ctt gtc act cgg ggt tog aga aga tga a  |                                | 755 |
| arrestor      | ccc agg cag tca gag tga tcNH2          | all 2'Ome bases, 3' Amine      | 756 |
| SRT           | cggagggaagcagtggtgatctcgccgNH2         | 3' 2 last base 2'Ome, 3' Amine | 757 |
| FRET probe    | Fcaac(Cy3)gcttctcog                    |                                | 758 |
| hIL-1 $\beta$ |  |                                |     |
| probe         | cog tca cgc ctc cat ctg ttg agg g NH2  | 3' Amine                       | 759 |
| invader       | cag gtc ctg gaa gga gca ctt a          |                                | 760 |
| stacker       | cca tca gct tct ttg ttc ttg tca tc     | all 2'Ome bases                | 761 |
| arrestor      | gcc cta aac aga tgg agg cg             | all 2'Ome bases                | 762 |
| SRT           | cggaagaagcagtggtgatctcgccgNH2          | 3' base 2'Ome, 3' Amine        | 763 |
| FRET probe    | Fcaac(Cy3)gcttctcog                    |                                | 764 |
| probe         | cog tca cgc ctc cat ctg ttg agg gc NH2 | 3' Amine                       | 765 |
| invader       | cag gtc ctg gaa gga gca ctt a          |                                | 766 |
| stacker       | cat cag ctt ctt tgt tct tgt cat cc     | all 2'Ome bases                | 767 |
| arrestor      | gcc cta aac aga tgg agg cg             | all 2'Ome bases                | 768 |
| SRT           | cggaagaagcagtggtgatctcgccgNH2          | 3' base 2'Ome, 3' Amine        | 769 |
| FRET probe    | Fcaac(Cy3)gcttctcog                    |                                | 770 |
| probe         | cog tca cgc ctc cat ctg ttg agg NH2    | 3' Amine                       | 771 |

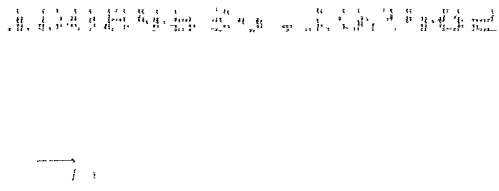


|            |  |                                |     |
|------------|--|--------------------------------|-----|
| invader    | cag gtc ctg gaa gga gca ctt a              | all 2'Ome bases                | 772 |
| stacker    | <u>gcc atc agc ttc ttt gtt ctt gtc atc</u> | 3'base 2'Ome, 3'Amine          | 773 |
| SRT        | cggagaagcagttggaggcgtgacggtNH2             |                                | 774 |
| FRET probe | Fcaac(Cy3)gcttctctcg                       |                                | 775 |
| probe      | cog tca cgc ctc cca tca gct tcNH2          | 3' Amine                       | 776 |
| invader    | gag cac ttc atc tgt tta ggg a              |                                | 777 |
| stacker    | <u>ttt gtt ctt gtc atc ctc att gcc ac</u>  | all 2'Ome bases                | 778 |
| arrestor   | <u>gaa gct gat ggg agg cg</u>              | all 2'Ome bases                | 779 |
| SRT        | cggagaagcagttggaggcgtgacggtNH2             | 3'base 2'Ome, 3'Amine          | 780 |
| FRET probe | Fcaac(Cy3)gcttctctcg                       |                                | 781 |
| probe      | cgcgagatcactcctctgttttagggcNH2             | 3' Amine                       | 782 |
| probe      | cgcgagatcactcctctgttttagggcNH2             | 3' Amine                       | 783 |
| invader    | caggtcciggaaggagcacia                      |                                | 784 |
| arrestor   | <u>ggccctaaacagatgagtgtcNH2</u>            | all 2'Ome bases, 3' Amine      | 785 |
| SRT        | cggagaagcagttggaggcgtgacggtNH2             | 3' 2 last base 2'Ome, 3' Amine | 786 |
| FRET probe | Fcaac(Cy3)gcttctctcg                       |                                | 787 |

|            |                                       |                       |     |
|------------|---------------------------------------|-----------------------|-----|
| hcFOS      |                                       |                       | 788 |
| probe      | cog tca cgc ctc cag cag gtt ggc NH2   | 3' Amine              | 789 |
| invader    | gct tga ccc agg gag gg                |                       | 790 |
| arrestor   | <u>gcc aag gtc ctg gag ggc</u>        | all 2'Ome bases       | 791 |
| SRT        | cggagaagcagttggaggcgtgacggtNH2        | 3'base 2'Ome, 3'Amine | 792 |
| FRET probe | Fcaac(Cy3)gcttctctcg                  |                       |     |
| probe      | cog tca cgc ctc cag cag gtt gg NH2    | 3' Amine              | 793 |
| invader    | gct tga ccc agg gag gg                |                       | 794 |
| stacker    | <u>caa tct cgg tct gca aag cag ac</u> | all 2'Ome bases       | 795 |
| arrestor   | <u>gcc aag gtc ctg gag ggc</u>        | all 2'Ome bases       | 796 |
| SRT        | cggagaagcagttggaggcgtgacggtNH2        | 3'base 2'Ome, 3'Amine | 797 |
| FRET probe | Fcaac(Cy3)gcttctctcg                  |                       | 798 |
| probe      | cog tca cgc ctc tca gca ggt tgg NH2   | 3' Amine              | 799 |
| invader    | act cta gtt ttt cct tct cct a         |                       | 800 |
| stacker    | <u>caa tct cgg tct gca aag cag ac</u> | all 2'Ome bases       | 801 |
| arrestor   | <u>cca acc tgc tga gag ggc</u>        | all 2'Ome bases       | 802 |
| SRT        | cggagaagcagttggaggcgtgacggtNH2        | 3'base 2'Ome, 3'Amine | 803 |
| FRET probe | Fcaac(Cy3)gcttctctcg                  |                       | 804 |



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|            |  |     |                                 |     |
|------------|--|-----|---------------------------------|-----|
| probe      | aac gag gcg cac ctt cgg agt ttg gg NH2 | 870 | 3' Amine                        | 870 |
| invader    | ggg ttg tgg agt gag tgt tca agt a      | 871 |                                 |     |
| arrestor   | ccc aaa ctc cga agg tgc g              | 872 | all 2'Ome bases                 |     |
| SRT        | cggagaagcagttggcgccctgttaaNH2          | 873 | 3' last 5 bases 2'Ome, 3' Amine |     |
| FRET probe | Fcaac(Cy3)gcttctccg                    | 874 |                                 |     |
| probe      | cgc tca cgc ctc ctt cgg agt ttg g NH2  | 875 | 3' Amine                        |     |
| invader    | ggg ttg tgg agt gag tgt tca agt a      | 876 |                                 |     |
| stacker    | gtt tgc ttg tcc agg tgg                | 877 | all 2'Ome bases                 |     |
| arrestor   | cca aac tcc gaa gga ggc g              | 878 | all 2'Ome bases                 |     |
| SRT        | cggagaagcagttggaggcgtagcggtNH2         | 879 | 3'base 2'Ome, 3'Amine           |     |
| FRET probe | Fcaac(Cy3)gcttctccg                    | 880 |                                 |     |
| probe      | cgc tca cgc ctc ctt cgg agt ttg NH2    | 881 | 3' Amine                        |     |
| invader    | ggg ttg tgg agt gag tgt tca agt a      | 882 |                                 |     |
| stacker    | gtt ttg ctt gtc cag gtg g              | 883 | all 2'Ome bases                 |     |
| arrestor   | cca aac tcc gaa gga ggc g              | 884 | all 2'Ome bases                 |     |
| SRT        | cggagaagcagttggaggcgtagcggtNH2         | 885 | 3'base 2'Ome, 3'Amine           |     |
| FRET probe | Fcaac(Cy3)gcttctccg                    | 886 |                                 |     |
| probe      | cgc tca cgc ctc ctt cgg agt ttNH2      | 887 | 3' Amine                        |     |
| invader    | ggg ttg tgg agt gag tgt tca agt a      | 888 |                                 |     |
| stacker    | ggg ttg gct tct cca ggt g              | 889 | all 2'Ome bases                 |     |
| arrestor   | cca aac tcc gaa gga ggc g              | 890 | all 2'Ome bases                 |     |
| SRT        | cggagaagcagttggaggcgtagcggtNH2         | 891 | 3'base 2'Ome, 3'Amine           |     |
| FRET probe | Fcaac(Cy3)gcttctccg                    | 892 |                                 |     |
| probe      | cgtcacgcctccggagttgggNH2               | 893 | 3' Amine                        |     |
| invader    | gtt gtg gag tga gtg ttc aag tat ta     | 894 |                                 |     |
| stacker    | ttt gct tgt cca ggt ggt cca g          | 895 | all 2'Ome bases                 |     |
| arrestor   | ccc aaa ctc cgg agg cg                 | 896 | all 2'Ome bases                 |     |
| SRT        | cggagaagcagttggaggcgtagcggtNH2         | 897 | 3'base 2'Ome, 3'Amine           |     |
| FRET probe | Fcaac(Cy3)gcttctccg                    | 898 |                                 |     |
| probe      | cgc cga gat cac cgg agt ttg ggNH2      | 899 | 3' Amine                        |     |
| invader    | gtt gtg gag tga gtg ttc aag tat ta     | 900 |                                 |     |
| stacker    | ttt gct tgt cca ggt ggt cca g          | 901 | all 2'Ome bases                 |     |
| arrestor   | cta gtg gcc tca aac cc                 | 902 | all 2'Ome bases                 |     |
| SRT        | cggagaagcagttggtagtcgcgcggNH2          | 903 | 3' Amine                        |     |
| FRET probe | Fcaac(Cy3)gcttctccg                    | 904 |                                 |     |

899 900 901 902 903 904



905  
906  
907  
908  
909  
910

#### hUbiqutin

probe cgc cga gat cac ctt tac att ttc tat cgt  
probe cgc cga gat cac ctt tac att ttc tat cgt NH2  
invader 5' -cct tcc tta tcc tgg atc ttg gca -3'  
arrestor acc ata gaa aat gta aag gtg atc  
SRT 5'-cgc agt gag aat gag gtg atc tgc ggggt-3'  
FRET probe 5'-Red-ctc-Z21-ttc tca gtg cg-3'

911  
912  
913  
914  
915  
916

hIL-2  
probe gtctctttgtctccgcacgtgccNH2  
invader cca gca gta aat gct cca gtt gta ga  
stacker tag aac ttg aag tag gtg c  
arrestor caa aga aaa cac agg agg c  
SRT ccaggaagcaagtggaggcgtagcggg  
FRET probe Fcac(Z21)tgctctgtgg

917  
918  
919  
920  
921  
922

probe aac gag gcg cac ctg tgt ttt ctt ttg NH2  
invader cca gca gta aat gct cca gtt gta ga  
stacker tag aac ttg aag tag gtg c  
arrestor caa aga aaa cac agg tgc g  
SRT ccaggaagcaagtggaggcgtagcggg  
FRET probe Fcac(Z21)tgctctgtgg

923  
924  
925  
926  
927  
928

probe ccg tca cgc ctc ctc cag ttg tag NH2  
invader aaa atc atc tgt aaa tcc agc agt aaa tga  
stacker ctg tgt ttt ctt tgt aga ac  
arrestor cta caa ctg gag gag gc  
SRT ccaggaagcaagtggaggcgtagcggg  
FRET probe Fcac(Z21)tgctctgtgg

929  
930  
931  
932  
933  
934

probe aac gag gcg cac ctc cag ttg tag NH2  
invader aaa atc atc tgt aaa tcc agc agt aaa tga  
stacker ctg tgt ttt ctt tgt aga ac  
arrestor cta caa ctg gag gtg cg  
SRT ccaggaagcaagtggaggcgtagcggg  
FRET probe Fcac(Z21)tgctctgtgg



|            |   |                           |     |
|------------|---|---------------------------|-----|
| probe      | cog tca cgc ctc ctg tgt ttt ctt tgt aNH2        | 3' Amine                  | 935 |
| invader    | gta aat cca gca gta aat gct cca gtt gta ga      | all 2'Ome bases           | 936 |
| stacker    | <u>gaa ctt gaa gta ggt gca ctg tt</u>           | all 2'Ome bases, 3' amine | 937 |
| arrestor   | <u>tacaaagaaaacacacagaggcggtNH2</u>             | 3' bases 2'Ome            | 938 |
| SRT        | ccaggagcaagtgaggcggaacggu                       |                           | 939 |
| FRET probe | Fcaac(Z21)tgctctgtgg                            |                           | 940 |
| probe      | aac gag gcg cac ctg tgt ttt ctt tgt aNH2        | 3' Amine                  | 941 |
| invader    | gta aat cca gca gta aat gct cca gtt gta ga      | all 2'Ome bases           | 942 |
| stacker    | <u>gaa ctt gaa gta ggt gca ctg tt</u>           | all 2'Ome bases           | 943 |
| arrestor   | <u>tac aaa gaa aac aca ggt gcg</u>              | 3' last 3 bases 2'Ome     | 944 |
| SRT        | ccaggagcaagtgaggcggtctgttt                      |                           | 945 |
| FRET probe | Fcaac(Z21)tgctctgtgg                            |                           | 946 |
| probe      | cog tca cgc ctc ctc cag ttg taa NH2             | 3' Amine                  | 947 |
| probe      | cog tca cgc ctc ctc cag ttg tat NH2             | 3' Amine                  | 948 |
| probe      | cog tca cgc ctc ctc cag ttg tac NH2             | 3' Amine                  | 949 |
| invader    | <u>aaa atc atc tgc aaa tcc agc agt aaa tga</u>  | 5' 6 bases 2'Ome          | 950 |
| stacker    | <u>ctg tgt ttt ctt tgt aga ac</u>               | all 2'Ome bases           | 951 |
| arrestor   | <u>cta caa ctg gag gag gc</u>                   | all 2'Ome bases           | 952 |
| SRT        | ccaggagcaagtgaggcggtgacggu                      | 3' 3bases 2'Ome           | 953 |
| FRET probe | Fcaac(Z21)tgctctgtgg                            |                           | 954 |
| probe      | gcc gtc acg cct ccc ttc ttg atg NH2             | 3' Amine                  | 955 |
| invader    | ttc tag aca ctg aag atg ttt cag ttc tgt gga     | all 2'Ome bases, 3' Amine | 956 |
| arrestor   | <u>cat gcc caa gaa ggg agg cg NH2</u>           | 3'2 bases 2'Ome, 3'Amine  | 957 |
| SRT        | cggagagcagcttgaggcggtgacggcNH2                  |                           | 958 |
| FRET probe | Fcaac(Cy3)gcttctctcg                            |                           | 959 |
| probe      | cog tca cgc ctc taa ttc cat tca aaa tca tct NH2 | 3' Amine                  | 960 |
| invader    | cat cct ggt gag ttt ggg att ctt gta att tat a   | all 2'Ome bases, 3' Amine | 961 |
| stacker    | <u>gta aat cca gca gta aat gct cca gNH2</u>     | all 2'Ome bases, 3' Amine | 962 |
| arrestor   | <u>aga tga ttt tga atg gaa tta gag gcg NH2</u>  | 3'2 bases 2'Ome, 3'Amine  | 963 |
| SRT        | cggagagcagcttgaggcggtgacggcNH2                  |                           | 964 |
| FRET probe | Fcaac(Cy3)gcttctctcg                            |                           | 965 |
| probe      | cog ccg aga tca cct gtg ttt tct ttt ta          | All 2' Ome                | 966 |
| invader    | gta aat cca gca gta aat gct cca gtt gta ga      |                           | 967 |
| stacker    | <u>gaa ctt gaa gta ggt gca ctg tt</u>           |                           | 968 |
| stacker    | gaa ctt gaa gta ggt gca ctg tt                  |                           | 969 |

11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100



|            |  |                                 |     |
|------------|--|---------------------------------|-----|
| stacker    | gaa ctt gaa gta ggt gca ctg tt               | 5' 3bases 2'Ome                 | 970 |
| stacker    | gaa ctt gaa gta ggt gca ctg tt               | 5' 6bases 2'Ome                 | 971 |
| arrestor   | tac aaa gaa aac aca ggt gat ct               | All 2' Ome                      | 972 |
| SRT        | cggaggaagcagttggtgatctggcggNH2               | 3' 2 last base 2'Ome, 3' Amine  | 973 |
| FRET probe | Fcaac(Cy3)gcttctctcg                         |                                 | 974 |
| probe      | aac gag gcg cac cct tct tgg gca tgnH2        | 3' Amine                        | 975 |
| invader    | ttc tag aca ctg aag atg tt cag ttc tgt gga   |                                 | 976 |
| arrestor   | cat gcc caa gaa ggg tgc gNH2                 | all 2'Ome bases                 | 977 |
| SRT        | cggaggaagcagttggtgacctgttaaNH2               | 3' last 5 bases 2'Ome, 3' Amine | 978 |
| FRET probe | Fcaac(Cy3)gcttctctcg                         |                                 | 979 |
| probe      | aac gag gcg cac taa ttc cat tca aaa tca tct  |                                 | 980 |
| invader    | cat cct ggt gag tt ggg att ctt gta att tat a |                                 | 981 |
| stacker    | gta aat cca gca gta aat gct cca gNH2         | all 2'Ome bases, 3' Amine       | 982 |
| arrestor   | aga tga ttt tga atg gaa tta ctg gt NH2       | all 2'Ome bases, 3' Amine       | 983 |
| SRT        | cggaggaagcagttggtgacctgttaaNH2               | 3' last 5 bases 2'Ome, 3' Amine | 984 |
| FRET probe | Fcaac(Cy3)gcttctctcg                         |                                 | 985 |

|            |   |                                 |      |
|------------|---|---------------------------------|------|
| hil-4      | oct gtc tgc ctg cca gtt gtg ttc ttg gag NH2 | 3' Amine                        | 986  |
| probe      | ccc tgc aga agg ttt cct tct a               |                                 | 987  |
| invader    | ccc tgc aga tgg ttt cct tct a               |                                 | 988  |
| arrestor   | ctc caa gaa cac aac tgg cag cNH2            | all 2'Ome bases, 3' Amine       | 989  |
| arrestor   | ctc caa gaa cac aac tgg cag cga NH2         | all 2'Ome bases, 3' Amine       | 990  |
| arrestor   | ctc caa gaa cac aac tgg cag cga gNH2        | all 2'Ome bases, 3' Amine       | 991  |
| SRT        | cggaggaagcagttggtgacctgttaaNH2              | 3' last base 2'Ome, 3' Amine    | 992  |
| FRET probe | Fcaac(Cy3)gcttctctcg                        |                                 | 993  |
| probe      | aac gag gcg cac ctt gga ggc agc aaa NH2     | 3' Amine                        | 994  |
| probe      | aac gag gcg cac ctt gga ggc agc aaNH2       | 3' Amine                        | 995  |
| invader    | aag gtt tcc ttc tca gtt gtg tta             |                                 | 996  |
| arrestor   | ctt tgc tgc ctc caa ggt gcg NH2             | all 2'Ome bases, 3' Amine       | 997  |
| SRT        | cggaggaagcagttggtgacctgttaaNH2              | 3' last 5 bases 2'Ome, 3' Amine | 998  |
| FRET probe | Fcaac(Cy3)gcttctctcg                        |                                 | 999  |
| probe      | cag tca cgt ctc tgg agg cag caa aga tg NH2  | 3' Amine                        | 1000 |
| invader    | aag gtt tcc ttc tca gtt gtg ttc ta          |                                 | 1001 |
| arrestor   | cat ctt tgc tgc ctc cag aga cg NH2          | all 2'Ome bases, 3' Amine       | 1002 |





1003  
1004

3' Amine

gctactgagatgaaggagagcgactgtatNH2  
Fcttc(Cy3)tcctagtc

SRT  
FRET probe

1005  
1006  
1007  
1008  
1009

3' Amine

aac gag gcg cac ctt gga ggc agc aaa g NH2  
aag gtt tcc ttc tca gtt glg tta  
ctt tgc tgc ctc caa ggt gcg NH2  
cggaggagcagttggtgcgcctcgttaa  
Fcaac(Cy3)gcttctctcg

probe  
invader  
arrestor  
SRT  
FRET probe

1010  
1011  
1012  
1013  
1014

3' Amine

gcg cga gat cac ccc ttt agt ttt aca aca gtNH2  
gaa ttg gca ctc aaa tgt gtt gtc aga ga  
act gtt gta aaa cta aag ggg gtc at NH2  
cggaggagcagttggtgcgcctcgttaa  
Fcaac(Cy3)gcttctctcg

mil-2  
probe  
invader  
arrestor  
SRT  
FRET probe

1015  
1016  
1017  
1018  
1019  
1020  
1021  
1022

3' Amine

tgc cgc cga gat cac ccc ttt agt ttt aca aca gtNH2  
gaa ttg gca ctc aaa tgt gtt gtc aga ga  
act gtt gta aaa cta aag ggg gtc NH2  
act gtt gta aaa cta aag ggg gtc at NH2  
act gtt gta aaa cta aag ggg gtc at ctcgNH2  
cggaggagcagttggtgcgcctcgttaa  
Fcaac(Cy3)gcttctctcg

probe  
invader  
arrestor  
arrestor  
arrestor  
SRT  
FRET probe

1023  
1024  
1025  
1026  
1027  
1028

3' Amine

gc cgc cga gat cac ccc ttt agt ttt aca aca gtNH2  
c cgc cga gat cac ccc ttt agt ttt aca aca gtNH2  
gaa ttg gca ctc aaa tgt gtt gtc aga ga  
act gtt gta aaa cta aag ggg gtc at NH2  
cggaggagcagttggtgcgcctcgttaa  
Fcaac(Cy3)gcttctctcg

probe  
probe  
invader  
arrestor  
SRT  
FRET probe

1029  
1030  
1031  
1032  
1033

3' Amine

aac gag gcg cac ccc ttt agt ttt aca aca gt NH2  
gaa ttg gca ctc aaa tgt gtt gtc aga ga  
agtaactgtttgtaaaactaaagggtgag  
cggaggagcagttggtgcgcctcgttaa  
Fcaac(Cy3)gcttctctcg

probe  
invader  
arrestor  
SRT  
FRET probe

1034

3' Amine

aac gag gcg cac ccc ttt agt ttt aca aca gt NH2

probe

|            |  |                            |      |
|------------|--|----------------------------|------|
| invader    | gaa ttg gca ctc aaa tgt gtt gtc aga ga     | all 2'Ome bases, 3' Amine  | 1035 |
| arrestor   | agt aac tgt tgt aaa act aaa ggg gtc cg NH2 | 3' last 5 bases 2'Ome      | 1036 |
| SRT        | cggaggagcagtggtggtgcgcctcgtaa              |                            | 1037 |
| FRET probe | Fcaac(Cy3)gcttctctcg                       |                            | 1038 |
| probe      | cggtcacgcctccctttagttttacaacNH2            | 3' Amine                   | 1039 |
| invader    | gaa ttg gca ctc aaa tgt gtt gtc aga ga     |                            | 1040 |
| stacker    | agt tac tct gat att gct gat gaa att ctc ag | all 2'Ome bases,           | 1041 |
| arrestor   | gtgttaaaactaaaggggagggcg                   | all 2'Ome bases,           | 1042 |
| SRT        | cggagaagcagtggtgagcggtgacggNH2             | 3' base 2'Ome, 3' Amine    | 1043 |
| FRET probe | Fcaac(Cy3)gcttctctcg                       |                            | 1044 |
| probe      | cggcagatcacccctttagttttacaacNH2            | 3' Amine                   | 1045 |
| invader    | gaa ttg gca ctc aaa tgt gtt gtc aga ga     |                            | 1046 |
| stacker    | agt tac tct gat att gct gat gaa att ctc ag | All 2'Ome                  | 1047 |
| arrestor   | gtgttaaaactaaaggggagggcg                   | All 2'Ome                  | 1048 |
| SRT        | cggagaagcagtggtgagcggtgacggNH2             | 3' Amine                   | 1049 |
| FRET probe | Fcaac(Cy3)gcttctctcg                       |                            | 1050 |
| probe      | cggtcacgcctccctttagttttacaacNH2            | 3' Amine                   | 1051 |
| invader    | gaa ttg gca ctc aaa tgt gtt gtc aga ga     |                            | 1052 |
| stacker    | cagttactctgatattgctgatgaaattctca           | All 2'Ome                  | 1053 |
| arrestor   | gtgttaaaactaaaggggagggcg                   | All 2'Ome                  | 1054 |
| SRT        | cggagaagcagtggtgagcggtgacggNH2             | 3' base 2'Ome, 3' Amine    | 1055 |
| FRET probe | Fcaac(Cy3)gcttctctcg                       |                            | 1056 |
| probe      | cggtcacgcctccctttagttttacaacNH2            | 3' Amine                   | 1057 |
| invader    | gaa ttg gca ctc aaa tgt gtt gtc aga ga     |                            | 1058 |
| stacker    | cagttactctgatattgctgatgaaattctca           | All 2'Ome                  | 1059 |
| arrestor   | gtgttaaaactaaaggggagggcg                   | All 2'Ome                  | 1060 |
| SRT        | cggagaagcagtggtgagcggtgacggNH2             | 3' 2 bases 2'Ome, 3' Amine | 1061 |
| FRET probe | Fcaac(Cy3)gcttctctcg                       |                            | 1062 |
| mIL-10     |  |                            |      |
| probe      | ccg tca cgc ctc ccg tta gct aag at NH2     | 3' Amine                   | 1063 |
| invader    | cga ggt tt cca agg agt tgt tta             |                            | 1064 |
| stacker    | ccc tgg atc aga ttt aga gag c              | all 2'Ome bases,           | 1065 |
| arrestor   | atc tta gct aac ggg agg cg                 | all 2'Ome bases,           | 1066 |
| SRT        | cggagaagcagtggtgagcggtgacggNH2             | 3' base 2'Ome, 3' Amine    | 1067 |



1068

FRET probe

Fcaac(Cy3)gcttctccg

probe  
invader  
stacker  
arrestor  
SRT  
FRET probe

cgc tca cgc ctc agt tgc ttc cgt tNH2  
aga ggt aca aac gag gtt ttc caa ggc  
agc taa gat ccc tgg atc aga ttt aga ga  
aac gga aac aac tga ggc g  
ccaggagcaagtggagcgtagcggg  
Fcaac(Z21)tgcttctgg

3' Amine

all 2'Ome bases,  
all 2'Ome bases,  
3' 3bases 2'Ome

1069  
1070  
1071  
1072  
1073  
1074

probe  
invader  
stacker  
arrestor  
SRT  
FRET probe

cgc tca cgc ctc cgc tta gct aNH2  
caa acg agg ttt tcc aag gag ttg a  
aga tcc ctg gat cag att tag aga gct c  
tag cta acg gaa aga ggc g  
ccaggagcaagtggagcgtagcggg  
Fcaac(Z21)tgcttctgg

3' Amine

all 2'Ome bases,  
all 2'Ome bases,  
3' 3bases 2'Ome

1075  
1076  
1077  
1078  
1079  
1080

probe  
invader  
stacker  
arrestor  
SRT  
FRET probe

cgc tca cgc ctc cgc tta gNH2  
aga ggt aca aac gag gtt ttc caa gga ga  
cta aga tcc ctg gat cag att tag aga g  
cta cgg aacaacagagcg  
ccaggagcaagtggagcgtagcggg  
Fcaac(Z21)tgcttctgg

3' Amine

All 2'Ome  
All 2'Ome  
3' 3bases 2'Ome

1081  
1082  
1083  
1084  
1085  
1086

hIFN- $\gamma$   
probe  
invader  
arrestor  
SRT  
FRET probe

aac gag ggc cgc att acc aat gcc taa gaa aag agt tNH2  
tgc att att ttt ctg tca ctc tcc tct ttc caa tta  
aac tct ttt ctt agg cat ttt gaa ggt ggc NH2  
cggaggaagcagttggtgcgcctcgttaaaNH2  
Fcaac(Cy3)gcttctccg

3' Amine

all 2'Ome bases, 3' Amine  
3' last 5 bases 2'Ome

1087  
1088  
1089  
1090  
1091

probe  
invader  
arrestor  
SRT  
FRET probe

cag tca cgt ctc tct tca aaa tgc cta aga aaa gag tNH2  
tct gca tta ttt ttc tgc ctc tct cct ctt tcc aat a  
act ctt ttc tta ggc att ttg aag aga gac gNH2  
gctactgagatgaaggagacgtgactgttNH2  
Fcttc(Cy3)tcctagtagc

3' Amine

all 2'Ome bases, 3' Amine  
all 2'Ome bases, 3' Amine

1092  
1093  
1094  
1095  
1096

mIFN- $\gamma$   
probe

aac gag ggc cgc cct ttt gcc agt tcc NH2

3' Amine

1097



1098  
1099  
1100  
1101

all 2'Ome bases.3' Amine  
all 2'Ome bases.3' Amine

1102  
1103  
1104  
1105  
1106  
1107  
1108

3' Amine

all 2'Ome bases  
all 2'Ome bases  
3' last 5 bases 2'Ome  
3' last 5 bases 2'Ome

1109  
1110  
1111  
1112  
1113  
1114

3' Amine

all 2'Ome bases  
all 2'Ome bases

1115  
1116  
1117  
1118  
1119  
1120

3' Amine

all 2'Ome bases  
all 2'Ome bases  
3' last 5 bases 2'Ome

1121  
1122  
1123  
1124  
1125  
1126  
1127

3' Amine  
3' Amine

all 2'Ome bases.3' Amine  
all 2'Ome bases.3' Amine  
3'2 bases 2'Ome, 3'Amine

1128  
1129  
1130

3' Amine  
3' Amine

gct ctg cag gat ttt cat gtc acc ata  
gag gaa ctg gca aaa ggg tgc gNH2  
gctactagatgaaggagacgtgactgttNH2  
Fcttc(Cy3)ttctcagtagc

invader  
arrestor  
SRT  
FRET probe

aac gag gcg cac cct ttg gcc agt NH2  
gct ctg cag gat ttt cat gtc acc ata  
tcc tcc aga tat cca aga aga gac tc  
act ggc aaa agg cgg gc  
cgg agg aaag cag ttg gtc ctc gcu aa NH2  
cgg aag aaag cag ttg gtc ctc gcu aa NH2  
Fcaac(Cy3)gcttctccg

probe  
invader  
stacker  
arrestor  
SRT  
SRT  
FRET probe

gcc gca cgc cgc ctt ttg cca gt NH2  
gct ctg cag gat ttt cat gtc acc ata  
tcc tcc aga tat cca aga aga gac tc  
act ggc aaa agg cgg gc  
cgg agg aag cag ttg cgg cgt gcg gca NH2  
Fcaac(Cy3)gcttctccg

probe  
invader  
stacker  
arrestor  
SRT  
FRET probe

aac gag gcg cac cct ttg gcc agt tc NH2  
gct ctg cag gat ttt cat gtc acc ata  
ctc cag ata tcc aag aag aga ctc  
gaa ctg gca aaa ggg tgc g  
cggaggagcagttggtgcctcgtaaaNH2  
Fcaac(Cy3)gcttctccg

probe  
invader  
stacker  
arrestor  
SRT  
FRET probe

cgg tca cgc ctc ctt ggc aaa act gca ccNH2  
cgg tca cgc ctc ctt ggc aaa act gca cca NH2  
ctt tat gca ctg aca tct aag ttc ttg agc act ca  
tgg tgc agt ttt gcc aag gag gcg NH2  
tgg tgc agt ttt gcc aag gag gcg tg NH2  
cggaggagcagttggtgcctcgtaaaNH2  
Fcaac(Cy3)gcttctccg

hIL-8  
probe  
probe  
invader  
arrestor  
arrestor  
SRT  
FRET probe

cgg tca cgc ctc cat ctt cac tga ttc ttg gNH2  
cgg tca cgc ctc cat ctt cac tga ttc ttg gNH2  
agt gtt gaa gta gat ttg ctt gaa gtt tca ctg ga

probe  
probe  
invader



|            |  |                           |      |
|------------|--|---------------------------|------|
| stacker    | gat acc aca gag aat gaa tttt                                   | all 2'Ome bases           | 1131 |
| arrestor   | tcc aag aat cag tga aga tgg agg cg NH2                         | all 2'Ome bases, 3' Amine | 1132 |
| arrestor   | tcc aag aat cag tga aga tgg agg cgt gNH2                       | all 2'Ome bases, 3' Amine | 1133 |
| arrestor   | g aat cag tga aga tgg agg cg                                   | all 2'Ome bases           | 1134 |
| SRT        | cggagaagcagttggaggcgtgacggcNH2                                 | 3'2 bases 2'Ome, 3' Amine | 1135 |
| FRET probe | Fcaac(Cy3)gcttctccg  |                           | 1136 |
| probe      | cgg tca cgc cct tgg ctc aat tt gct NH2                         | 3' Amine                  | 1137 |
| invader    | cca ttc aat tcc tga aat taa agt tgg gat att ctc ttg gca        | 5' 10 bases are 2'Ome     | 1138 |
| invader    | cc tga aat taa agt tgg gat att ctc ttg gca                     |                           | 1139 |
| invader    | cc tga aat taa agt tgg gat att ctc ttg gca                     |                           | 1140 |
| arrestor   | agg aaa att gag cca agg gag gcg NH2                            | all 2'Ome bases, 3' Amine | 1141 |
| arrestor   | agg aaa att gag cca agg gag gcg tgnH2                          | all 2'Ome bases, 3' Amine | 1142 |
| SRT        | cggagaagcagttggaggcgtgacggcNH2                                 | 3'2 bases 2'Ome, 3' Amine | 1143 |
| FRET probe | Fcaac(Cy3)gcttctccg  |                           | 1144 |
| probe      | cgg tca cgc ctc cat ctt cac tga ttc ttg NH2                    | 3' Amine                  | 1145 |
| invader    | ttc tag cca acc cat tca att cct gaa att aaa gtt cgg ata ttc ta |                           | 1146 |
| invader    | cc cat tca att cct gaa att aaa gtt cgg ata ttc ta              | 5' 10 bases 2'Ome         | 1147 |
| invader    | cc cat tca att cct gaa att aaa gtt cgg ata ttc ta              |                           | 1148 |
| arrestor   | cca agg gcc aag gag gcg tNH2                                   |                           | 1149 |
| SRT        | cggagaagcagttggaggcgtgacggcNH2                                 | 3'2 bases 2'Ome, 3' Amine | 1150 |
| FRET probe | Fcaac(Cy3)gcttctccg  |                           | 1151 |
| probe      | cgg tca cgc ctc cat ctt cac tga ttc ttc NH2                    | 3' Amine                  | 1152 |
| invader    | agt gtt gaa gta gat ttg ctt gaa gtt tca ctg ga                 |                           | 1153 |
| stacker    | ttg gat acc aca gag aat gaa tt                                 | all 2'Ome bases           | 1154 |
| SRT        | cggagaagcagttggaggcgtgacggcNH2                                 | 3'base 2'Ome, 3' Amine    | 1155 |
| FRET probe | Fcaac(Cy3)gcttctccg  |                           | 1156 |
| probe      | cgg tca cgc ctc cat ctt cac tga tt NH2                         | 3' Amine                  | 1157 |
| invader    | agt gtt gaa gta gat ttg ctt gaa gtt tca ctg ga                 |                           | 1158 |
| stacker    | ctt gga tac cac aga gaa tga att                                |                           | 1159 |
| SRT        | cggagaagcagttggaggcgtgacggcNH2                                 | 3'base 2'Ome, 3' Amine    | 1160 |
| FRET probe | Fcaac(Cy3)gcttctccg  |                           | 1161 |
| probe      | cgg tca cgc ctc cat ctt cac tga ttc ttg NH2                    | 3' Amine                  | 1162 |
| invader    | agt gtt gaa gta gat ttg ctt gaa gtt tca ctg ga                 |                           | 1163 |
| helper     | ata-cca-cag-aga-atg-aat-ttt-ttt-atg                            | all 2'Ome bases           | 1164 |
| arrestor   | tcc aag aat cag tga aga tgg agg cgt gNH2                       | all 2'Ome bases, 3' Amine | 1165 |

1166 1167 1168 1169 1170 1171 1172 1173 1174 1175 1176 1177 1178 1179 1180 1181 1182 1183 1184 1185 1186 1187 1188 1189 1190 1191 1192 1193 1194 1195 1196 1197 1198 1199 1200



1166  
1167

3'base 2'Ome, 3'Amine

cggaagaagcagttggaggcgtgacggNH2  
Fcaac(Cy3)gcttctctcog

SRT  
FRET probe

1168  
1169

3' Amine

cggaagaagcagttgggtatctcggcgNH2  
Fcaac(Cy3)gcttctctcog

SRT  
FRET probe

1170  
1171

3'base 2'Ome, 3'Amine

cggaagaagcagttggaggcgtgacggNH2  
Fcaac(Cy3)gcttctctcog

SRT  
FRET probe

1172  
1173

3' 3bases 2'Ome

ccagggaagcaagtggaggcgtgacggg  
Fcaac(Cy3)gcttctctcog

SRT  
FRET probe

1174  
1175

3' 2 last base 2'Ome, 3' Amine

cggaagaagcagttgggtatctcggcgNH2  
Fcaac(Cy3)gcttctctcog

SRT  
FRET probe

1176  
1177

3'2 bases 2'Ome, 3'Amine

cggaagaagcagttggaggcgtgacggcNH2  
Fcaac(Cy3)gcttctctcog

SRT  
FRET probe

1178  
1179

3' last 3 bases 2'Ome

ccagggaagcaagtgggtgcgcctcgttt  
Fcaac(Cy3)gcttctctcog

SRT  
FRET probe

1180  
1181

3' last5 bases 2'Ome

cggaagaagcagttgggtgcgcctcgtttNH2  
Fcaac(Cy3)gcttctctcog

SRT  
FRET probe

1182  
1183

3' Last 2bases 2'Ome, 3' Amine

cggaagaagcagttgggtatctcggcgcaNH2  
Fcaac(Cy3)gcttctctcog

SRT  
FRET probe

1184  
1185

3' Amine

gctactgagatgaaggagacgtgactgtNH2  
Fcttc(Cy3)tcctcagtagc

SRT  
FRET probe

1186  
1187

3' 2 bases 2'Ome, 3'Amine

ccagggaagcagttggaggcgtgacggNH2  
Fcaac(Cy3)gcttctctcog

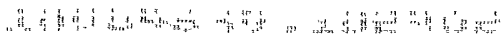
SRT  
FRET probe

1188  
1189

agg agc cac tcc att gga tga agc  
atg tac aga atc ccc ggt tat tta tgc aga

h3A4 probe  
h3A4 invader  
Capture Sequence

Set 1



1209  
1210  
1211  
1212

aac gag gcg cac cac aga caa tga gag a-NH2  
aac gag gcg cac cac aga caa tga gag a  
**tct ctc att gtc tgt ggt gcg c-NH2**  
gct caa tgc atg tac aga atc ccc ggt t

Set 7/Set 8  
h3A4 probe  
h3A4 probe  
h3A4 arrestor  
h3A4 stacking oligo

$$\left\{ \begin{array}{l} \text{---} \end{array} \right\}$$



1213

h3A4 invader  
SRT  
FRET Oligo  
cct cct tta tat toc caa gta taa cac tct aa

1214  
1215  
1216  
1217

Set 9  
h3A4 probe  
h3A4 arrestor  
h3A4 invader  
h3A4 stacking oligo  
SRT  
FRET Oligo  
aac gag gcg cac cac aga caa tga ga-NH2  
tct cat tgt ctg tgg tgc gc-NH2  
cct cct tta tat toc caa gta taa cac tct aa  
gag ctc aat gca tgt aca gaa toc ccg

1218  
1219  
1220  
1221

Set 1/Set 2  
h3A4 probe  
h3A4 probe  
h3A4 invader  
h3A4 arrestor  
SRT  
AACGAGGCGCACCTCTTATCAGAGCTC  
AACGAGGCGCACCTCTTATCAGAGCTC-NH2  
ttg tgg agg aaa tta ttg aga aat gtt gat ta  
GAGCTCTGATAAGAGGIGCG-NH2

1222  
1223  
1224  
1225  
1226  
1227

Set 1/ Set 2/ Set 3  
h3A4 probe  
h3A4 arrestor  
h3A4 invader  
h3A4 stacking oligo  
h3A4 stacking oligo  
h3A4 stacking oligo  
SRT  
FRET  
ccg tca cgc ctc gcc cca ca - NH2  
tgt ggg gcg agg cg  
cag cac agg ctg ttg acc atc ata aaa c  
uuu-uuc-cau-acu-uuu-uau-gac-auu-c  
ctt ttc cag act ttt tat gac att c  
ctt ttc cag act ttt tat gac

1228  
1229  
1230  
1231

Set 4/Set 5  
h3A4 probe  
h3A4 probe  
h3A4 invader  
h3A4 stacking oligo  
SRT  
FRET  
ccg tca cgc ctc gcc cca ca  
ccg tca cgc ctc gcc cca ca - HEX  
cag cac agg ctg ttg acc atc ata aaa c  
uuu-uuc-cau-acu-uuu-uau-gac-auu-c

1232

Set 6/ Set 7/ Set 8  
h3A4 probe  
ccg tca cgc ctc gcc cca cc - NH2





1233  
1234  
1235  
1236  
1237

h3A4 probe  
h3A4 probe  
h3A4 probe  
h3A4 arrestor  
h3A4 invader  
h3A4 stacking oligo  
SRT  
FRET

cog tca cgc ctc gcc cca cg - NH2  
cog tca cgc ctc gcc cca ct - NH2  
tgt ggg gcg agg cg  
cag cac agg ctg ttg acc atc ata aaa c  
cuu-uuc-cau-acu-uuu-uau-gac-auu-c

1238  
1239  
1240  
1241

Set 1  
h3A4 probe  
h3A4 arrestor  
h3A4 invader  
h3A4 stacking oligo  
SRT  
FRET

cog tca cgc ctg atc ata aaa gcc c - NH2  
ggg ctt tta tga tca ggc g  
cag cac agg ctg ttg acc c  
cac act ttt cca tac ttt tta tg

1242  
1243  
1244  
1245

Set 2  
h3A4 probe  
h3A4 arrestor  
h3A4 invader  
h3A4 stacking oligo  
SRT  
FRET

aac gag gcg cac cca ttg gat gaa g - NH2  
ctt cat cca atg ggt gcg c  
gta cag aat ccc cgg tta ttt atg cag ta  
ccc atc ttc att tca gag

1246  
1247

Set 1  
h3A5 probe  
h3A5 invader  
Capture Sequence

gtg gcg tat cgt gtc taa ttt caa g  
aat ggg ttt ttc tgg ttg aag aag tcc ttg a

1248  
1249  
1250  
1251

Set 2/Set 3  
h3A5 probe  
h3A5 probe  
h3A5 arrestor  
h3A5 invader  
SRT  
FRET

AACGAGGCGCACCGTGCTCTAAATTTCAAG  
AACGAGGCGCACCGTGCTCTAAATTTCAAGGG-Pi  
CTTGAAATTAGACACGGTGCG-NH2  
aat ggg ttt ttc tgg ttg aag aag tcc ttg a

1252  
1253

Set 4  
h3A5 probe  
h3A5 arrestor

AACGAGGCGCACCGTGCTCTAAATTTCAAG  
CTTGAAATTAGACACGGTGCG-NH2

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h3A5 invader  
h3A5 stacking oligo  
SRT  
FRET

1256  
1257  
1258  
1259

Set 5  
h3A5 probe  
h3A5 arrestor  
h3A5 invader  
h3A5 stacking oligo  
SRT  
FRET

1260  
1261  
1262  
1263

Set 6  
h3A5 probe  
h3A5 arrestor  
h3A5 invader  
SRT  
FRET probe

1264  
1265  
1266  
1267  
1268  
1269

Set 7/Set 8  
h3A5 probe  
h3A5 probe  
h3A5 arrestor  
h3A5 arrestor  
h3A5 invader  
h3A5 stacking oligo  
SRT  
FRET

1270  
1271  
1272  
1273

Set 9  
h3A5 probe  
h3A5 arrestor  
h3A5 invader  
h3A5 stacking oligo  
SRT  
FRET

1274

Set 10  
h3A5 probe

1275  
1276  
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1300

1275  
1276  
1277

h3A5 arrestor  
h3A5 invader  
h3A5 stacking oligo  
SRT  
FRET

tga aat tag aca cgg tgc gc  
ggg ttt tct ggt tga aga agt cct tga  
agg gga tct gtg ttt ct

1278  
1279

Set 1  
h3A5 probe  
h3A5 invader  
Capture Sequence

tgg cgt atc tga ccc ttt ggg aat  
gaa gag cat aag ttg gaa tca cca cca ta

1280  
1281

Set 1  
h3A5 probe  
h3A5 invader  
Capture Sequence

ata cgg ttg gtc ctc tca agt cta  
ccc cat tga tt caa cat ctt tct tgc aac

1282  
1283  
1284  
1285

Set 2/Set 3  
h3A5 probe  
h3A5 arrestor  
h3A5 invader  
h3A5 stacking oligo  
SRT  
FRET

aac gag ggc cac ggc tgt cta att tc - NH2  
gaa att aga cac ggc tgc gc  
ggg ttt tct ggt tga aga agt cct tc  
ccg ggg atc tgt gtt tc

1286  
1287  
1288  
1289

h3A5 probe  
h3A5 arrestor  
h3A5 invader  
h3A5 stacking oligo  
SRT  
FRET

cgg tca cgc ctc ggc tgt cta att tc -NH2  
gaa att aga cac ggc agg cg  
ggg ttt tct ggt tga aga agt cct tc  
ccg ggg atc tgt gtt tc

1290  
1291  
1292  
1293

Set 1  
h3A5 probe  
h3A5 arrestor  
h3A5 invader  
h3A5 stacking oligo  
SRT  
FRET  
Set 2

aac gag ggc cag ttc ata cgt tcc -NH2  
gga acg tat gaa ctg cgc  
cca gca cag gga gtt gac ca  
cca cat ttt tcc ata ctt t





1294  
1295  
1296  
1297

h3A5 probe  
h3A5 arrestor  
h3A5 invader  
h3A5 stacking oligo  
SRT  
FRET

ccg tca cgc ctc ttc ata cgt tcc -NH2  
gga acg tat gaa cag gcg  
cca gca cag gga gtt gac ca  
cca cat ttt tcc ata ctt t

1298  
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1303  
1304

Set 1-Set 4

h3A5 probe  
h3A5 probe  
h3A5 probe  
h3A5 arrestor  
h3A5 invader  
h3A5 stacking oligo  
SRT  
FRET

aac gag gcg cac agt tga cct tca  
aac gag gcg cac agt tga cct tca  
aac gag gcg cac agt tga cct tca - HEX  
tga agg tca act gtc cgc  
gtg atg gcc agc aca ggg c  
tac gtt ccc cac att ttt c  
tac gtt ccc cac att ttt c

1305  
1306  
1307  
1308

Set 5

h3A5 probe  
h3A5 arrestor  
h3A5 invader  
h3A5 stacking oligo  
SRT  
FRET

ccg tca cgc ctc agt tga cct tca  
tga agg tca act gag gcg  
gtg atg gcc agc aca ggg c  
tac gtt ccc cac att ttt c

1309  
1310  
1311  
1312

Set 6

h3A5 probe  
h3A5 arrestor  
h3A5 invader  
h3A5 stacking oligo  
SRT  
FRET

aac gag gcg cac tcc tct caa gt -NH2  
act tga gag gag tgc gc  
cca ttt att tca aca tct ttc ttg caa ga  
cta ata gca act ggg aat aat c

1313  
1314  
1315  
1316

Set 7

h3A5 probe  
h3A5 arrestor  
h3A5 invader  
h3A5 stacking oligo  
SRT

ccg tca cgc ctc tcc tct caa gt - NH2  
act tga gag gag agg cg  
cca ttt att tca aca tct ttc ttg caa ga  
cta ata gca act ggg aat aat c



FRET

Set 8  
h3A5 probe aac gag ggc cac agt tga cct tc - NH2  
h3A5 arrestor tga agg tca act gtg cgc  
h3A5 invader gtg atg gcc agc aca ggg c  
h3A5 stacking oligo ata cgt tcc cca cat ttt tc  
SRT  
FRET

1317  
1318  
1319  
1320

Set 1

h3A7 Probe tgg cgt atc tgg att aaa tct taa aag  
h3A7 Invader gac ttt tat tga gag aac gaa tgg atc taa a  
Capture Oligo

1321  
1322

Set 2

h3A7 Primary Probe AACGAGGGCGCACTGGATTAAATCTTAAAAG  
h3A7 Invader gac ttt tat tga gag aac gaa tgg atc taa a  
h3A7 Arrestor CTTTAAAGATTTAATCCAGTGGC-NH2  
SRT  
FRET

1323  
1324  
1325

Set 3

h3A7 Primary Probe AACGAGGGCGCACTGGATTAAATCTTAAAAG  
h3A7 Invader gac ttt tat tga gag aac gaa tgg atc taa a  
h3A7 Arrestor CTTTAAAGATTTAATCCAGTGGC-NH2  
h3A7 Stacking Oligo ctt ctt ggt gtt ttc ca  
SRT  
FRET

1326  
1327  
1328  
1329

Set 4

h3A7 Probe agg agc cac tca tcc ctt gac t  
h3A7 Invader oligo ctt agg gaa atc agg ctc cac tta cgg ta  
Capture Oligo

1330  
1331

Set 5/Set 6

h3A7 Primary Probe AACGAGGGCGCACCTCATCCCTTGACT  
h3A7 Primary Probe AACGAGGGCGCACCTCATCCCTTGACT-NH2  
h3A7 Arrestor AGTCAAGGGATGAGGTGGC-NH2  
h3A7 Invader oligo ctt agg gaa atc agg ctc cac tta cgg ta

1332  
1333  
1334  
1335



SRT  
FRET

Set 7 - Set 10

h3A7 Primary Probe aac gag gcg cac ctc atc cct tga c-NH2  
h3A7 Arrestor gtc aag gga tga ggt gcg c-NH2  
h3A7 Invader oligo ctt agg gaa atc agg ctc cac tta cgg ta  
h3A7 Stacking Oligo tca gcc tt aga aca atg ggt tt tct gtt ag3'  
h3A7 Stacking Oligo tca gcc tt aga aca atg ggt tt tct g  
h3A7 Stacking Oligo ctc agc ctt tag aac aat ggg tt ttc t  
h3A7 Stacking Oligo ctc agc ctt tag aac aat ggg tt ttc t  
SRT  
FRET

Set 11

h3A7 Primary Probe aac gag gcg cac ctc atc cct tga-NH2  
h3A7 Primary Probe aac gag gcg cac ctc atc cct tga c  
h3A7 Arrestor tca agg gat gag gtc cgc-NH2  
h3A7 Invader oligo ctt agg gaa atc agg ctc cac tta cgg ta  
h3A7 Stacking Oligo ctc agc ctt tag aac aat ggg tt ttc tgt tag  
SRT  
FRET

Set 1

h3A7 Probe ata cgg ttg gta aag taa ttg gag gt  
h3A7 Invader gaa gcc cgt ctt cat ttc agg gtt cta tt c  
Capture Sequence

Set 2

h3A7 Primary Probe AACGAGGCGCACGTAAGTAATTTGAGGT  
h3A7 Invader gaa gcc cgt ctt cat ttc agg gtt cta tt c  
h3A7 Arrestor ACCTCAAAATTACTTTACGTCG-NH2  
SRT  
FRET

Set 3

h3A7 Primary Probe AACGAGGCGCACGTAAGTAATTTGAGGT  
h3A7 Invader gaa gcc cgt ctt cat ttc agg gtt cta tt c  
h3A7 Arrestor ACCTCAAAATTACTTTACGTCG-NH2  
h3A7 Stacking Oligo ctc tgg tgt tct ggg

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SRT  
FRET

Set 1  
h3A7 probe ccc tca cgc ctc gtc ata aat acc cc - NH2  
h3A7 arrestor **ggg gtc ttt atg acc agg cg**  
h3A7 invader gcc agc ata ggc tgt tga cac  
h3A7 stacking oligo **aga ctt ttc tat act ttt tat aac att c**  
SRT  
FRET

1357  
1358  
1359  
1360

Set 2 - Set 4

h3A7 probe aac gag gcg cac gtc ata aat acc cc -NH2  
h3A7 probe aac gag gcg cac gtc ata aat acc cc  
h3A7 probe aac gag gcg cac gtc ata aat acc cc - HEX  
h3A7 arrestor **ggg gta ttt atg acc tgc gc**  
h3A7 invader gcc agc ata ggc tgt tga cac  
h3A7 stacking oligo **aga ctt ttc tat act ttt tat aac att c**  
SRT  
FRET

1361  
1362  
1363  
1364  
1365  
1366

Set 1  
h3A7 probe ccc tca cgc ctc gat taa atc tta aaa gct t - NH2  
h3A7 arrestor **aag ctt tta aga ttt aat cga ggc g**  
h3A7 invader gac ttt tat tga gag aac gaa tgg atc taa tgc  
h3A7 stacking oligo **ctt ggt gtt ttc cac aaa g**  
SRT  
FRET

1367  
1368  
1369  
1370

Set 2  
h3A7 probe aac gag gcg cac gat taa atc tta aaa gct t -NH2  
h3A7 arrestor **aag ctt tta aga ttt aat cgt ggc c**  
h3A7 invader gac ttt tat tga gag aac gaa tgg atc taa tgc  
h3A7 stacking oligo **ctt ggt gtt ttc cac aaa g**  
SRT  
FRET

1371  
1372  
1373  
1374

Set 1  
h3A7 probe ccc tca cgc ctg tca tcc ctt g - NH2  
h3A7 arrestor **caa ggc atg cac ggc g**

1375  
1376



1377  
1378

h3A7 invader gga aat cag gct cca ctt acg gtc a  
h3A7 stacking oligo act cag cct tta gaa caa tg  
SRT  
FRET

1379  
1380  
1381  
1382

Set 1  
h3A7 probe ccg tca cgc ctc taa agt atg agg tc -NH2  
h3A7 arrestor gac ctc aaa tta ctt tag agg cg  
h3A7 invader cgt ctt cat ttc agg gtt cta ttt ga  
h3A7 stacking oligo tct ggt gtt ctg gg  
SRT  
FRET

1383  
1384  
1385  
1386

Set 2  
h3A7 probe aac gag gcg cac taa agt aat ttg agg tc -NH2  
h3A7 arrestor gac ctc aaa gga ctt tag tgc gc  
h3A7 invader cgt ctt cat ttc agg gtt cta ttt ga  
h3A7 stacking oligo tct ggt gtt ctg gg  
SRT  
FRET

1387  
1388

Set 1  
r4A1 Probe tgg-cgt-atc-tag-gct-ttg-ctt-cc  
r4A1 Invader ttc atg tag tca ggg tca tag aca att aag a  
Capture Sequence

1389  
1390  
1391  
1392

Set 2  
r4A1 Primary Probe AACGAGGCGCACTAGGCTTTGCTTCC  
r4A1 Arrestor GGAAAGCAAGCCTAGTGCG-NH2  
r4A1 Arrestor gga agc aaa gcc tag tgc gc-NH2  
r4A1 Invader ttc atg tag tca ggg tca tag aca att aag a  
FRET Probe 1

1393  
1394  
1395

Set 3  
r4A1 Primary Probe aac gag gcg cac tag gct ttg ctt ccc-NH2  
r4A1 Arrestor ggg aag caa agc cta gtc cgc-NH2  
r4A1 Invader ttc atg tag tca ggg tca tag aca att aag a  
SRT  
FRET Probe 1

1396  
1397  
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1500





Set 4  
r4A1 Primary Probe aac gag gcg cac tag gct ttg ctt c-NH2  
r4A1 Arrestor gaa gca aag cct agt gcg c  
r4A1 Stackers ccc aga acc atc gag gaa agg c  
r4A1 Invader ttc atg tag tca ggg tca tag aca att aag a  
SRT  
FRET Probe 1

1396  
1397  
1398  
1399

Set 5  
r4A1 Primary Probe aac gag gcg cac tag gct ttg ctt-NH2  
r4A1 Arrestor aag caa agc cta gtg cgc-NH2  
r4A1 Invader ttc atg tag tca ggg tca tag aca att aag a  
r4A1 Stackers ccc cag aac cat cga gga aag g  
r4A1 Stackers ccc cag aac cat cga gga aag g  
SRT  
FRET Probe 1

1400  
1401  
1402  
1403  
1404

Set 6  
r4A1 Primary Probe aac gag gcg cac tag gct ttg ct-NH2  
r4A1 Primary Probe aac gag gcg cac tag gct ttg ct - HEX  
r4A1 Probe aac gag gcg cac tag gct ttg ct  
r4A1 Arrestor agc aaa gcc tag tgc gc-NH2  
r4A1 Arrestor agc aaa gcc tag tgc gc  
r4A1 Invader ttc atg tag tca ggg tca tag aca att aag a  
r4A1 Stackers tcc cca gaa cca tgc agg aaa gg  
r4A1 Stackers tcc cca gaa cca tgc agg aaa gg  
SRT  
FRET Probe 1

1405  
1406  
1407  
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1410  
1411  
1412

Set 1  
r4A1 Probe ata cgg ttg gtc ttg acc tgc c  
r4A1 Invader agg aga tat gtt gaa aga ttt cta tag agg ac  
Capture Sequence

1413  
1414

Set 2  
r4A1 Primary Probe AACGAGGCGCACGCTTTGACCTGCC  
r4A1 Arrestor GGCAGGTCAAGACGTCG-NH2  
r4A1 Invader agg aga tat gtt gaa aga ttt cta tag agg ac

1415  
1416  
1417



SRT  
FRET Probe 1

Set 3  
r4A1 Primary Probe AACGAGGCGCACGTCCTTGACCTGC-Pi  
r4A1 Arrestor GGCAGGTCAAGACGTCGG-NH2  
r4A1 Invader agg aga tat gtt gaa aga ttt cta tag agg ac  
SRT  
FRET Probe 1

1418  
1419  
1420

Set 1  
r4A1 Probe tgg cgt atc tta gat gga gla agg a  
r4A1 Invader att cct cat aat tca aaa ggg act tag tag gt

1421  
1422

Set 2  
r4A1 Primary Probe AACGAGGCGCACTTAGATGGAGTAAGGA  
r4A1 Arrestor ICCTTACICCAICTAAGTCGG-NH2  
SRT  
FRET Probe 1

1423  
1424

Set 1  
r4A1 Primary Probe aac gag gcg cac tgg ata ccc ttg gg-NH2  
r4A1 Arrestor ccc aag ggt atc cag tgc gc-NH2  
r4A1 Invader ggt gga gac cat aaa tgg aga gtg tga cta  
SRT  
FRET Probe 1

1425  
1426  
1427

Set 1  
r4A2 Probe aac gag gcg cac agg tgt ctg gag taa aag-NH2  
r4A2 Arrestor ctt tta ctc cag aca cct gtg cgc-NH2  
r4A2 Invader gtc cac gca caa gct ggg ac  
SRT  
FRET Probe 1

1428  
1429  
1430

Set 1  
r4A2 Probe aac gag gcg cac aga agg ccc ctt-NH2  
r4A2 Arrestor aag ggg cct tct gtg cgc-NH2  
r4A2 Invader cct tga aca gca cca gaa ata gac tga gca c  
r4A2 stacking oligo gga aga acc cag aga cac cat cc  
SRT

1431  
1432  
1433  
1434



FRET Probe 1

Set 2

r4A2 Probe cgc tca cgc ctc aga agg ccc ctt g-NH2  
r4A2 Arrestor **aag ggg cct tct gag gcg g-NH2**  
r4A2 Invader cct tga aca gca cca gaa ata gac tga gca c  
SRT

FRET Probe 1

Set 3

r4A2 Probe aac gag gcg cac aga agg ccc ctt g-NH2  
r4A2 Arrestor **caa ggg gcc ttc tgt gcg g-NH2**  
r4A2 Invader cct tga aca gca cca gaa ata gac tga gca c  
SRT

FRET Probe 1

Set 4

r4A2 Probe aac gag gcg cac aga agg ccc ctt g-NH2  
r4A2 Probe aac gag gcg cac aga agg ccc ctt  
r4A2 Probe aac gag gcg cac aga agg ccc ctt - HEX  
r4A2 Arrestor **cca agg ggc ctt ctg tgc gc g-NH2**  
r 4A2 Arrestor **aag ggg cct tct gta cgc**  
r4A2 Invader cct tga aca gca cca gaa ata gac tga gca c  
SRT

FRET Probe 1

Set 1

r4A3 Probe aac gag gcg cac tga aca gag tcc gc-NH2  
r4A3 Arrestor **gcg gac tct gtc aag tgc gc g-NH2**  
r4A3 Invader gct tct ccc att tgt cta gca tta taa  
SRT

FRET Probe 1

Set 2

r4A3 Probe aac gag gcg cac tga aca gag tcc gc-NH2  
r4A3 Arrestor **gcg act ctg tca agt gcg g-NH2**  
r4A3 Invader gct tct ccc att tgt cta gca tta taa  
r4A3 stacking oligo cca tga ttt tga cat agg gtt tga gga tg  
SRT

FRET Probe 1

1435  
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1453



Set 3  
r4A3 Probe  
r4A3 Probe  
rCYP 4A3 Probe  
r4A3 Arrestor  
rCYP 4A3 Arrestor  
r4A3 Invader  
r4A3 stacking oligo  
SRT  
FRET Probe 1

aac gag gcg cac ttg aca gag tcc-NH2  
aac gag gcg cac ttg aca gag tcc  
aac gag gcg cac ttg aca gag tcc - HEX  
**gga ctc tgt caa gtg cgc-NH2**  
**gga ctc tgt caa gtg cgc**  
gct tct ccc att tgt cta gca tta taa  
gcc atg att ttg aca tag ggt ttg agg atg

1454  
1455  
1456  
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1459  
1460

Set 1  
r2B1 probe  
r2B1 invader  
Capture Sequence

cgg agc ctc tgc ggt cat caa g  
tgg ata act gca tca gtg tat ggc att tta a

1461  
1462

Set 2/ Set 3  
r2B1 probe  
r2B1 probe  
r2B1 probe  
r2B1 invader  
Capture Sequence

gtg-gcg-tat-ctg-cgg-tca-tca-ag  
gtg-gcg-tat-ctg-cgg-tca-tca-a  
tgg ata act gca tca gtg tat ggc att tta a

1463  
1464  
1465

Set 4  
r2B1 probe  
r2B1 invader  
Capture Sequence

tg-gcg-tat-ctg-cgg-tca-tca-a  
tgg ata act gca tca gtg tat ggc att tta a

1466  
1467

Set 5 - Set 7  
r2B1 probe  
r2B1 arrestor  
r2B1 arrestor  
r2B1 arrestor  
r2B1 invader  
SRT  
FRET

aac-gag-gcg-cac-ctg-cgg-tca-tca-a  
**ttg-atg-acc-gca-ggt-gcg-cc-NH2**  
**ttg-atg-acc-gca-ggt-gcg-cc-Pi**  
**ttg-atg-acc-gca-ggt-gcg-cc-OH**  
tgg ata act gca tca gtg tat ggc att tta a

1468  
1469  
1470  
1471  
1472

Set 8  
r2B1 probe

aac-gag-gcg-cac-ctg-cgg-tca-tca-a

1473

1474 1475 1476 1477 1478 1479 1480 1481 1482 1483 1484 1485 1486 1487 1488 1489 1490 1491 1492 1493 1494 1495 1496 1497 1498 1499 1500



1474  
1475  
1476

**ttg-atg-acc-gca-ggt-gcg-cc-Pi**  
tgg ata act gca tca gtg tat ggc att tta a  
ggg ttg gta gcc tgt gtg agc cga t

r2B1 arrestor  
r2B1 invader  
r2B1 stacker  
SRT  
FRET

1477  
1478  
1479

**aac-gag-gcg-cac-ctg-cgg-tca-tca-a-NH2**  
**ttg-atg-acc-gca-ggt-gcg-NH2**  
tgg ata act gca tca gtg tat ggc att tta a

Set 9  
r2B1 probe  
r2B1 arrestor  
r2B1 invader  
SRT  
FRET

1480  
1481  
1482

**ggc-aac-gag-gca-cac-ctg-cgg-tca-tca-ag-Pi**  
**ttg-atg-acc-gca-ggt-gcg-cc-Pi**  
tgg ata act gca tca gtg tat ggc att tta a

Set 10  
r2B1 probe  
r2B1 arrestor  
r2B1 invader  
SRT  
FRET

1483  
1484  
1485

**aac-gag-ggg-cac-ctg-cgg-tca-tca-ag-NH2**  
ctt gat gac cgc agg tgc c-NH2  
tgg ata act gca tca gtg tat ggc att tta a

Set 11  
r2B1 probe  
r2B1 arrestor  
r2B1 invader  
SRT  
FRET

1486  
1487  
1488

**aac-gag-gcg-cac-ctg-cgg-tca-tca-agg-NH2**  
**cct-tga-tga-ccg-cag-gtg-cg-NH2**  
tgg ata act gca tca gtg tat ggc att tta a

Set 12  
r2B1 probe  
r2B1 arrestor  
r2B1 invader  
SRT  
FRET

1489  
1490  
1491

**atg-acg-tga-cag-acc-tgc-ggt-cat-caa-g-NH2**  
**ctt-gat-gac-cgc-agg-tct-gt-NH2**  
tgg ata act gca tca gtg tat ggc att tta a

Set 13  
r2B1 probe  
r2B1 arrestor  
r2B1 invader  
SRT  
FRET





1510  
1511  
1512

**ctt gat gac cgc agt gag agc**-NH2  
gtg gat aac tgc atc agt gta tgg cat ttt c  
ggt tgg tag cct gtg tga gcc gat c

r2B1 arrestor  
r2B1 invader  
r2B1 stacker  
SRT  
FRET

1513  
1514  
1515  
1516

cag tca cgt ctc act gcg gtc atc a-NH2  
**atg acc gca gtg aga cg**-NH2  
gtg gat aac tgc atc agt gta tgg cat ttt c  
caa ggg ttg gta gcc tgt gtg agc c

Set 20  
r2B1 probe  
r2B1 arrestor  
r2B1 invader  
r2B1 stacker  
SRT  
FRET

1517  
1518  
1519  
1520

ccg tca cgc ctc act gcg gtc atc a-NH2  
**tga tga ccg cag tga gcc g**-NH2  
gtg gat aac tgc atc agt gta tgg cat ttt c  
agg gtt ggt agc ctg tgt gag ccg a

Set 21  
r2B1 probe  
r2B1 arrestor  
r2B1 invader  
r2B1 stacker  
SRT  
FRET

1521  
1522  
1523  
1524

ccg tca cgc ctc act gcg gtc atc a-NH2  
**gat gac cgc agt gag gcg**-NH2  
gtg gat aac tgc atc agt gta tgg cat ttt c  
aag ggt tgg tag ccg gtg tg

Set 22  
r2B1 probe  
r2B1 arrestor  
r2B1 invader  
r2B1 stacker

1525  
1526  
1527  
1528  
1529

ccg tca cgc ctc act gcg gtc atc a-NH2  
ccg tca cgc ctc act gcg gtc at  
**atg acc gca gtg agc cg**-NH2  
gtg gat aac tgc atc agt gta tgg cat ttt c  
**caa** ggg ttg gta gcc tgt gtg agc c

Set 23  
r2B1 probe  
r2B1 probe  
r2B1 arrestor  
r2B1 invader  
r2B1 stacker  
SRT  
FRET

1530  
1531

atg gtg tct ttg gtg act ctg tgt ggt aca  
aac-gag-gcg-cac-tcc-aat-agg-gac-aag

Set 1  
r2B1 invader  
r2B1 probe



1532

ctt-gtc-cct-att-gga-gtg-cgc-c

r2B1 arrestor  
SRT  
FRET

1533  
1534

gcg gcg tac agc cgg tgt gag c  
cat ttt act gcg gtc atc aag ggt tgg tc

Set 1  
r2B1 probe  
r2B1 invader  
Capture Sequence

1535  
1536

tgg cgt atg agc cgg tgt gag c  
cat ttt act gcg gtc atc aag ggt tgg tc

r2B1 probe  
r2B1 invader  
Capture Sequence

1537  
1538  
1539

gga tga ctg cat cag tgt atg gca ttt tgc  
aac-gag-gcg-cac-gta-cga-tca-tca-agg  
cct-tga-tga-tcg-tac-tac-gtg-cgc-c-NH2

Set 1  
r2B2 invader  
r2B2 probe  
r2B2 arrestor  
SRT  
FRET

1540  
1541  
1542  
1543

atg gtg tct ttg gtg act ctg tgt ggt aac  
tgg cgt atg acc aat tgg ggc aa  
gat ctg caa atc tct gaa tct cgt gga tg  
tct tgg aga gca ggt acc ctg gga ac

Set 1  
r2B2 invader  
r2B2 probe  
r2B2 stacker  
r2B2 invader stacker

1544  
1545  
1546  
1547

tgg cgt atg acc aat tgg ggc aag  
atg gtg tct ttg gtg act ctg tgt ggt aac  
atc tgc aaa tct ctg aat ctg ggt gat ga  
tct tgg aga gca ggt acc ctg gga ac

Set 2  
r2B2 probe  
r2B2 invader  
r2B2 stacker  
r2B2 invader stacker

1548  
1549  
1550  
1551

aac-gag-gcg-cac-acc-aat-tgg-ggc-aag  
aac gac gcg cac acc aat tgg ggc aag  
cct-ggc-cca-att-ggt-gtg-cgc-c-NH2  
atg gtg tct ttg gtg act ctg tgt ggt aac

Set 3  
r2B2 probe  
r2B2 probe  
r2B2 arrestor  
r2B2 invader  
SRT  
FRET





|               |   |      |
|---------------|---|------|
| Set 4         | aac-gag-gcg-cac-acc-aat-tgg-ggc-aag-Pi      | 1552 |
| r2B2 probe    | <b>ctt-gcc-cca-att-ggt-gtg-cgc-c-Pi</b>     | 1553 |
| r2B2 arrestor | atg gtg tct ttg gtg act ctg tgt ggt aac     | 1554 |
| r2B2 invader  |   |      |
| SRT           |   |      |
| FRET          |   |      |
| Set 5         | <b>ctt gcc cca att ggt gtg cg-NH2</b>       | 1555 |
| r2B2 arrestor | aac-gag-gcg-cac-acc-aat-tgg-ggc-aag-NH2     | 1556 |
| r2B2 probe    | atg gtg tct ttg gtg act ctg tgt ggt aac     | 1557 |
| r2B2 invader  | atc tgc aaa tct ctg aat ctc gtg gat ga      | 1558 |
| r2B2 stacker  |   |      |
| SRT           |   |      |
| FRET          |   |      |
| Set 6         | ggc-aac-gag-gca-cac-aaa-ttg-ggg-caa-g       | 1559 |
| r2B2 probe    | <b>ctt-gcc-cca-att-ggt-gtg-cgc-c-NH2</b>    | 1560 |
| r2B2 arrestor | atg gtg tct ttg gtg act ctg tgt ggt aac     | 1561 |
| r2B2 invader  |   |      |
| SRT           |   |      |
| FRET          |   |      |
| Set 7         | aac gag gcg cac acc aat tgg ggc aag atc-NH2 | 1562 |
| r2B2 probe    | <b>gat ctt gcc cca att ggt gtg cg-NH2</b>   | 1563 |
| r2B2 arrestor | atg gtg tct ttg gtg act ctg tgt ggt aac     | 1564 |
| r2B2 invader  |   |      |
| SRT           |   |      |
| FRET          |   |      |
| Set 8         | aac gag gcg cac acc aat tgg ggc aag-NH2     | 1565 |
| r2B2 probe    | <b>ctt gcc cga att ggt gtg cg-NH2</b>       | 1566 |
| r2B2 arrestor | atg gtg tct ttg gtg act ctg tgt ggt aac     | 1567 |
| r2B2 invader  | atc tgc aaa tct ctg aat ctc gtg gat ga      | 1568 |
| r2B2 stacker  |   |      |
| SRT           |   |      |
| FRET          |   |      |
| Set 9         | cag tca cgt ctc atg gtg gcc tgt g-NH2       | 1569 |
| r2B2 probe    |   |      |

1569 1568 1567 1566 1565 1564 1563 1562 1561 1560 1559 1558 1557 1556 1555 1554 1553 1552



1570  
1571

gta tgg cat tt ggt acg atc atc aag ggc  
cac agg cca cca tga gac g-NH2

r2B2 invader  
r2B2 arrestor  
SRT  
FRET

1572  
1573  
1574  
1575

cag tca cgt ctc aga gcc aat cac ctg-NH2  
cga tca tca agg gat ggt ggc ctg tgc  
cag gta att ggc tct gag acg-NH2  
atc aat ctc ctt ttg gac tt ctc tgc g

Set 10  
r2B2 probe  
r2B2 invader  
r2B2 arrestor  
r2B2 stacker  
SRT  
FRET

1576  
1577  
1578  
1579

cag tca cgt ctc aga gcc aat cac ct-NH2  
cga tca tca agg gat ggt ggc ctg tgc  
agg tga ttg gct ctg aga cg-NH2  
gat caa tct cct tt gga ctt tct ctg c

Set 11  
r2B2 probe  
r2B2 invader  
r2B2 arrestor  
r2B2 stacker  
SRT  
FRET

1580

FAM-cag tca cgt ctc aga gcc aat cac ct-NH2

Set 12  
r2B2 probe

1581  
1582  
1583  
1584  
1585

cag tca cgt ctc aga gcc aat cac c-NH2  
ggt gat tgg ctc tga gac g-NH2  
cga tca tca agg gat ggt ggc ctg tgc  
gat caa tct cct tt gga ctt tct ctg c  
tga tca atc tcc tt tgg act ttc tct gc

Set 13 / Set 14  
r2B2 probe  
r2B2 arrestor  
r2B2 invader  
r2B2 stacker  
r2B2 stacker  
SRT  
FRET

1586  
1587  
1588  
1589

cag tca cgt ctc aga gcc aat cac-NH2  
gtg att ggc tct gag acg-NH2  
ctg atc aat ctc ctt ttg gac tt ctc tgc g  
cga tca tca agg gat ggt ggc ctg tgc

Set 15  
r2B2 probe  
r2B2 arrestor  
r2B2 stacker  
r2B2 invader  
SRT  
FRET



1590  
1591  
1592  
1593

Set 16  
r2B2 probe  
r2B2 arrestor  
r2B2 invader  
r2B2 stacker  
SRT  
FRET

cag tca cgt ctc aga ggc aat cac ct-NH2  
**agg tga ttg cct ctg aga cg-NH2**  
cga tca tca agg gat ggc ctg tgc  
gat caa tct cct ttg gga ctt tct ctg c

1594  
1595  
1596  
1597

Set 17  
r2B2 probe  
r2B2 arrestor  
r2B2 invader  
r2B2 stacker  
SRT  
FRET

cag tca cgt ctc aga ggc aat cac ctg-NH2  
**cag ctg att gcc tct gag acg-NH2**  
cga tca tca agg gat ggc ctg tgc  
atc aat ctc ctt ttg gac ttg ctc tgc g

1598  
1599  
1600  
1601

Set 18  
r2B2 probe  
r2B2 arrestor  
r2B2 invader  
r2B2 stacker  
SRT  
FRET

ccg tca cgc ctc aga gcc aat cac ct-NH2  
**agg tga ttg gct ctg agg cg-NH2**  
cga tca tca agg gat ggc ctg tgc  
gat caa tct cct ttg gga ctt tct ctg c

1602  
1603  
1604  
1605

Set 19  
r2B2 probe  
r2B2 arrestor  
r2B2 invader  
r2B2 stacker  
SRT  
FRET

ccg tca cgc ctc aga gcc aat cac c-NH2  
**ggg gat tgg ctc tga ggc g-NH2**  
cga tca tca agg gat ggc ctg tgc  
tga tca atc tcc ttg tgg act ttc tct gc

1606  
1607  
1608  
1609  
1610

Set 20-21  
r2B2 probe  
r2B2 probe  
r2B2 arrestor  
r2B2 invader  
r2B2 stacker

ccg tca cgc ctc aga gcc aat cac-NH2  
ccg tca cgc ctc aga gcc aat cac  
**ctg att gcc tct gag ccg-NH2**  
cga tca tca agg gat ggc ctg tgc  
**ctg** atc aat ctc ctt ttg gac ttg ctc tgc g



Set 22

r2B2 probe  
r2B2 invader  
r2B2 arrestor  
SRT  
FRET

cag tca cgt ctc atg gtc aaa gta ctg tgg-NH2  
gga agt gct cag gat tga agg tgt ctg gc  
cca cag tac ttt gac cat gag acg-NH2

1611  
1612  
1613

Set 23

r2B2 probe  
r2B2 arrestor  
r2B2 invader  
SRT  
FRET

aac gag ggc cac atg gtc aaa gta ctg tgg-NH2  
cca cag tac ttt gac cat gtg cgc-NH2  
gga agt gct cag gat tga agg tgt ctg gc

1614  
1615  
1616

r2B2 probe  
r2B2 invader

cat acg gtt ggg cct gtg aga gc  
cat ttt ggt acg atc atc aag gga tgg tc

1617  
1618

r3A1 probe  
r3A1 probe  
r3A1 invader  
r3A1 probe  
r3A1 probe  
r3A1 arrestor  
r3A1 probe  
r3A1 probe  
r3A1 arrestor  
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r3A1 probe  
r3A1 probe  
r3A1 probe

agg agc cac ggg tcc caa atc  
FL-agg agc cac ggg tcc caa atc  
tcc oct gtt tct tga aaa gtc cat gtg tga  
F-tgg cgt agt cgg gtc cca aat c  
cat-ctt-cgc-gga-cgg-gtc-cca-aat-c  
gat-ttg-gga-ccc-ggt-gcg-cc-NH2  
aac-gag-gcg-cac-cgg-gtc-cca-aat-c-NH2  
cat-ctt-cgc-gga-cgg-gtc-cca-aat-c - NH2  
gga ttt ggg acc cgt cgg cga - NH2  
gga-ttt-ggg-acc-cgt-cgg-cg -NH2  
gga ttt ggg acc cgt cgg c - NH2  
gat-ttg-gga-ccc-ggt-gcg-c-NH2  
gat-ttg-gga-ccc-ggt-gcg-NH2  
gat-ttg-gga-ccc-ggt-gcg-NH2  
gat-ttg-gga-ccc-ggt-gcg-ccf-NH2  
gat-ttg-gga-ccc-ggt-gcg-ccf-c-NH2

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aac gag ggc cac cgg gtc cca aat c-Pi

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|---------------|---|------|
| r3A1 invader  | tcc cct gtt tct tga aaa gtc cat gtc tga | 1637 |
| r3A1 probe    | aac gag gcg cac cgg gtc cca aat c-NH2   | 1638 |
| r3A1 arrestor | <b>gat ttg gga ccc ggt ggc-NH2</b>      | 1639 |
| r3A1 probe    | aac gag gcg cac cgg gtc cca aat c-NH2   | 1640 |
| r3A1 arrestor | <b>gga ttg ggc acc cgg tgc gc-NH2</b>   | 1641 |
| r3A1 probe    | aac gag gcg cac cgg gtc cca aat-NH2     | 1642 |
| r3A1 arrestor | <b>att ttg gac cgg gtc cca aat-NH2</b>  | 1643 |
| r3A1 stacker  | cgg tag agg acc agg acg                 | 1644 |
| r3A1 probe    | aac gag gcg cac cgg gtc cca aa-NH2      | 1645 |
| r3A1 arrestor | <b>ttt ggg acc cgg tgc gc-NH2</b>       | 1646 |
| r3A1 stacker  | tcc gta gag gag cac cag ga              | 1647 |
| r3A1 probe    | cag tca cgt ctc cgg gtc cca aa-NH2      | 1648 |
| r3A1 arrestor | <b>ttt ggg acc cgg aga cg-NH2</b>       | 1649 |
| r3A1 stacker  | tcc gta gag gag cac cag ga              | 1650 |
| r3A1 probe    | cgg tca cgc ctc cgg gtc cca aa-NH2      | 1651 |
| r3A1 arrestor | <b>ttt ggg acc cgg agg cg-NH2</b>       | 1652 |
| r3A1 stacker  | tcc gta gag gag cac cag ga              | 1653 |
| r3A1 stacker  | <b>tcc gta gag gag cac cag ga</b>       | 1654 |
| r3A1 probe    | aac gag gcg cac cgg gtc cca-NH2         | 1655 |
| r3A1 arrestor | <b>tgg gac cgg gtc cgc-NH2</b>          | 1656 |
| r3A1 probe    | cgg tca cgc ctc cgg gtc cca-NH2         | 1657 |
| r3A1 arrestor | <b>tgg gac cgg gag cgc-NH2</b>          | 1658 |
| r3A1 stacker  | aat cgg tag agg acc agg                 | 1659 |
| r3A1 probe    | aac gag gcg cac cgg gtc cca             | 1660 |

|               |  |      |
|---------------|--|------|
| r3A2 invader  | ttc ctt gtt tct taa aaa ttc cat gtc taa    | 1661 |
| r3A2 invader  | att ttg cga tac tt tta tag cac tcc atc     | 1662 |
| r3A2 probe    | tgg cgt atc tgg gtt cca agt c              | 1663 |
| r3A2 probe    | aac gag gcg cac gtc aaa tct ccc taa        | 1664 |
| r3A2 probe    | aac-gag-gcg-cac-tgg-gtt-cca-agt-c          | 1665 |
| r3A2 arrestor | <b>tta ggg aga tt gac gtc cgc c - NH2</b>  | 1666 |
| r3A2 arrestor | <b>gac-ttg-gaa-ccc-agt-gcg-c-NH2</b>       | 1667 |
| r3A2 probe    | aac gag gcg cac tgg gtt cca agt c          | 1668 |
| r3A2 probe    | aac-gag-gcg-cac-tgg-gtt-cca-agt-c-Pi       | 1669 |
| r3A2 arrestor | <b>gac ttg gaa ccc agt ggc-NH2</b>         | 1670 |
| r3A2 probe    | aac gag gcg cac tgg gtt cca agt c-NH2      | 1671 |
| r3A2 arrestor | <b>cga ctt gga acc cag tgc gc-NH2</b>      | 1672 |
| r3A2 probe    | aac gag gcg cac aac cat cca gtt cta ta-NH2 | 1673 |



|               |  |      |
|---------------|--|------|
| r3A2 invader  | gga atc gtc act act gac cct ttg ggt ala aac ac | 1674 |
| r3A2 stacker  | tct ttt tta cag act ctc tca agt cta tta cc     | 1675 |
| r3A2 arrestor | tat aga act tga tgg ttg tgc gc-NH2             | 1676 |
| r3A2 probe    | aac gag gcg cac aac cat caa gtt cta-NH2        | 1677 |
| r3A2 stacker  | tat ctt ttt tac aga ctc tct caa gtc tat tac c  | 1678 |
| r3A2 arrestor | tag aac ttg atg gtt gtc gcg-NH2                | 1679 |
| r3A2 probe    | cag tca cgt ctc ctc ggc agg gc-NH2             | 1680 |
| r3A2 invader  | cac aat atc gta ggt agg tgc ctt aa             | 1681 |
| r3A2 arrestor | gcc ctg ccg agg aga cg-NH2                     | 1682 |
| r3A2 probe    | cag tca cgt ctc ctc ggc agg g-NH2              | 1683 |
| r3A2 stacker  | ccc cat cga tct cct cct g                      | 1684 |
| r3A2 arrestor | ccc tgc cga gga gac g-NH2                      | 1685 |
| r3A2 probe    | cag tca cgt ctc ctc ggc agg-NH2                | 1686 |
| r3A2 stacker  | gcc cca tgg atc tcc tcc                        | 1687 |
| r3A2 arrestor | cct gcc gag gag acg-NH2                        | 1688 |
| r3A2 probe    | cag tca cgt ctc ctc ggc ag-NH2                 | 1689 |
| r3A2 stacker  | ggc ccc atc gat ctc ctc                        | 1690 |
| r3A2 arrestor | ctg ccg agg aga cg-NH2                         | 1691 |
| r3A2 probe    | cag tca cgc ctc ctc ggc agg-NH2                | 1692 |
| r3A2 arrestor | cct gcc gag gag gcg-NH2                        | 1693 |
| r3A2 stacker  | gcc cca tgg atc tcc tcc                        | 1694 |
| r3A2 probe    | ccg tca cgc ctc ctc ggc agg                    | 1695 |

|                  |   |      |
|------------------|---|------|
| hICAM-1 probe    | ccg tca cgc ctc ggc ttg tgt gtt c-NH2         | 1696 |
| hICAM-1 invader  | ccg gga tag gtt cag gga ggc gtc               | 1697 |
| hICAM-1 stacker  | ggt ttc atg ggg gtc cct                       | 1698 |
| hICAM-1 arrestor | gaa cac aca agc cga ggc g                     | 1699 |
| hVCAM-1 probe    | ccg tca cgc ctc ggc ttt gtt tgg-NH2           | 1700 |
| hVCAM-1 arrestor | cca aac aaa ggc gag gcg                       | 1701 |
| hVCAM-1 invader  | ggg caa cat tga cat aaa gtt ttg ggc tac tct c | 1702 |
| hVCAM-1 stacker  | ggt cga att cca tgt cat c                     | 1703 |
| hVCAM-1 probe    | ccg tca cgc ctc ggc ttt gtt tgg-NH2           | 1704 |
| hVCAM-1 arrestor | caa aca aag gcg agg cg                        | 1705 |
| hVCAM-1 stacker  | ggt tgc aat tcc atg tca tc                    | 1706 |
| hGAPDH probe     | aac gag gcg cac gct cct gga aga tg-NH2        | 1707 |
| hGAPDH arrestor  | cat ctt cca gga gcg tgc gcc-NH2               | 1708 |



1709

hgAPDH invader cac ttg att ttg gag gga tct ca

Secondary system oligos

|               |  |      |
|---------------|--|------|
| Capture Oligo | aaa agt ggc tcc t-(biotin)c                    | 1710 |
| Capture Oligo | aaa aga ggc tcc gct-(biotin)c                  | 1711 |
| Capture Oligo | aaa atg tac gcc gct-(biotin) c                 | 1712 |
| Capture Oligo | aaa aga tac gcc aca gct-(biotin) c             | 1713 |
| Capture Oligo | aaa acc aac cgt atg aac t-(biotin) c           | 1714 |
| Capture Oligo | aaa atc ata cgc cac t-(biotin)c                | 1715 |
| SRT           | cgg-agg-aag-cag-ttg-gtg-tgc-ctc-gtt-gcc-tt-NH2 | 1716 |
| SRT           | cgg agg aag cag ttg ttg ccc ctc ctc gtt aa-NH2 | 1717 |
| SRT           | cgg aag aag cag ttg ttg cgc ctc ctc gtt aa-NH2 | 1718 |
| SRT           | cgg aag aag cag ttg ttg cgc ctc ctc gtt aa-NH2 | 1719 |
| SRT           | cgg aag aag cag ttg ttg cgc ctc ctc gtt aa     | 1720 |
| SRT           | cgg aag aag cag ttg ttg cgc ctc ctc gtt aa     | 1721 |
| SRT           | cgg aag aag cag ttg ttg cgc ctc ctc gtt aa     | 1722 |
| SRT           | cgg aag aag cag ttg ttg gag gcg tga cgg t-NH2  | 1723 |
| SRT           | cgg aag aag cag ttg ttg gag gcg tga cgg a-NH2  | 1724 |
| SRT           | cgg aag aag cag ttg ttg gag gcg tga cgg a      | 1725 |
| SRT           | cgg aag aag cag ttg ttg gag gcg tga cgg t      | 1726 |
| SRT           | cgg aag aag cag ttg ttg gag gcg tga cgg t      | 1727 |
| SRT           | cgg aag aag cag ttg ttg gag gcg tga cgg t      | 1728 |
| SRT           | cgg aag aag cag ttg ttg gag gcg tga cgg a      | 1729 |
| FRET probe    | FL-caa c(cy3)gc ttc ctc                        | 1730 |
| FRET probe    | FL-caa c(cy3)gc ttc ctc c                      | 1731 |
| FRET probe    | FL-caa-c(cy3)g-ctt-cct-ccg                     | 1732 |
| FRET probe    | FL-caa-c(cy3)g-ctt-cct-ccg-uul                 | 1733 |
| FRET probe    | FL-caa-c(cy3)g-ctt-cct-ccg-uul-uul             | 1734 |
| FRET probe    | FL-caa-c(cy3)g-ctt-cct-ccg-NH2                 | 1735 |

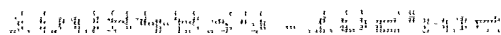


ORIGINAL OF THE PATENT

Oligo sequence descriptions:  
5' to 3' direction, 2'-Ome nts are bolded and underlined, internal modifications are defined in ( ), ASR of primary probes are underlined  
C18ddC = C18 linker+dideoxy C, ddC = dideoxy C, Fl = Fluorescein

| Oligo Type                            | Oligo Sequence                             | SEQ ID NO |
|---------------------------------------|--|-----------|
| <b>HUMAN IL-2</b>                     |  |           |
| Human IL-2 Probe                      | Fl- CGAAATTAATACGCCCTTCTGGGCAIGTAC -C18ddC | 1736      |
| Human IL-2 Probe                      | CGAAATTAATACGCCCTTCTGGGCAIGTAC -C18ddC     | 1737      |
| Human IL-2 Invader                    | CTGAAGATGTTTCAGTTCCTGTG- ddC               | 1738      |
| Human IL-2 Invader                    | GAAGATGTTTCAGTTCCTGTG                      | 1739      |
| Human IL-2 Probe                      | TCACCTCCTACCTTCTGGGCAIGTAA                 | 1740      |
| Human IL-2 Probe                      | TCACCTCCTACCTTCTGGGCAIGTAAAC               | 1741      |
| Human IL-2 Probe                      | TCACCTCCTACCTTCTGGGCAIGTAA- C18ddC         | 1742      |
| Human IL-2 Probe                      | GAAGATGTTTCAGTTCCTGTG- ddC                 | 1743      |
| Human IL-2 Invader                    | Fl- ACTTCCTACCTTCTGGGCAIGTAAAC             | 1744      |
| Human IL-2 Probe                      | ACTTCCTACCTTCTGGGCAIGTAAAC - C18ddC        | 1745      |
| Human IL-2 Invader                    | GAGTTGGGATCTTGTAAATAT- ddC                 | 1746      |
| Human IL-2 Probe                      | Fl- CGTGTCTGTGGCGTATCTTAATCCATTCATAAATC    | 1747      |
| Human IL-2 Probe                      | CGTGTCTGTGGCGTATCTTAATCCATTCATAAATC        | 1748      |
| Human IL-2 Probe                      | GAGTTGGGATCTTGTAAATAT - ddC                | 1749      |
| Human IL-2 Invader                    | Fl- CGTGTCTGTGGCGTATCTTAATCCATTCATAAATC    | 1750      |
| Human IL-2 Probe                      | CGTGTCTGTGGCGTATCTTAATCCATTCATAAATC        | 1751      |
| Human IL-2 Probe                      | Fl- CGTGTCTGTGGCGTATCTTAATCCATTCATAAATC    | 1752      |
| Human IL-2 Probe                      | CGTGTCTGTGGCGTATCTTAATCCATTCATAAATC        | 1753      |
| Human IL-2 Invader                    | GAGTTGGGATCTTGTAAATAT- ddC                 | 1754      |
| <b>HUMAN <math>\beta</math>-ACTIN</b> |  |           |
| Human $\beta$ -actin Probe            | Fl- TTCCTACTCTTGAATCTTCTG                  | 1755      |
| Human $\beta$ -actin Invader          | CTCAGGAGGAGCAATGATCTT                      | 1756      |
| Human $\beta$ -actin Invader          | CTCAGGAGGAGCAATGAT                         | 1757      |
| Human $\beta$ -actin Probe            | Fl- TCAGTTCCTACTCTGGGTCATCTTCTG -C18ddC    | 1758      |
| Human $\beta$ -actin Probe            | TCAGTTCCTACTCTGGGTCATCTTCTG -C18ddC        | 1759      |
| Human $\beta$ -actin Invader          | GTGTTGAAGGTCCTCAACATGAT- ddC               | 1760      |
| Human $\beta$ -actin Invader          | GGGTGTTGAAGGTCCTCAACATGAT - ddC            | 1761      |
| Human $\beta$ -actin Probe            | Fl- CGTGTCTGTGGCGTATCTGGGTCATCTTCTG        | 1762      |
| Human $\beta$ -actin Probe            | CGTGTCTGTGGCGTATCTGGGTCATCTTCTG            | 1763      |
| Human $\beta$ -actin Invader          | GGGTGTTGAAGGTCCTCAACATGAT - ddC            | 1764      |
| <b>HUMAN GAPDH</b>                    |  |           |
| Human GAPDH Probe                     | Fl- TTCATACGGTTGGTAGTTGAGGTCATG            | 1765      |
| Human GAPDH Probe                     | TTCATACGGTTGGTAGTTGAGGTCATG                | 1766      |
| Human GAPDH Invader                   | GGAATCATATTGGAACATGTAAACCATC               | 1767      |
| Human GAPDH Probe                     | Fl- TTCATACGGTTGGTCCTGGAAGAATG             | 1768      |





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|-----------------------------|------------------------------------|------|
| Mouse Oncostatin M Probe    | CTCTCTCGTCTCTAGGGCTCCCA            | 1807 |
| Mouse Oncostatin M Invader  | GTGTTTCAGGTTTGGAGCGGATAA           | 1808 |
| SRT                         | CAGTCTGAGATGAATGAGACGAGAGAGT-NH2   | 1809 |
| Mouse Oncostatin M Arrestor | CTTGGAGCCCTAGAG-NH2                | 1810 |
| Mouse Oncostatin M Probe    | FI- TGGCGTATCTAGGGCTCCCA           | 1811 |
| Mouse Oncostatin M Probe    | TGGCGTATCTAGGGCTCCCA               | 1812 |
| Mouse Oncostatin M Invader  | GTGTTTCAGGTTTGGAGCGGATAA           | 1813 |
| Mouse Oncostatin M Probe    | TGGCGTATCTAGGGCTCCCA               | 1814 |
| Mouse Oncostatin M Probe    | TGGCGTATCTAGGGCTCCCA               | 1815 |
| Mouse Oncostatin M Invader  | CACTGAGCCGATGAAGCGATGGTAA          | 1816 |
| Mouse Oncostatin M Probe    | TGGCGTATCTAGGGCTCCCA               | 1817 |
| Mouse Oncostatin M Invader  | GTGTTTCAGGTTTGGAGCGGATAA           | 1818 |
| Mouse Oncostatin M Probe    | CTCTCTCGTCTCTAGGGCTCCCA            | 1819 |
| Mouse Oncostatin M Invader  | GGCAGCTCTCAGGTCAGGTGTGA            | 1820 |
| Mouse Oncostatin M Invader  | AGCAGCTCTCAGGTCAGGTGTGA            | 1821 |
| SRT                         | CAGTCTGAGATGAATGAGACGAGAGT-NH2     | 1822 |
| FRET Probe                  | FI-ATTTC(CY3)TCTCAGAC-3'NH2        | 1823 |
| Mouse Oncostatin M Arrestor | CAAAACCTGAGAGAC-3'NH2              | 1824 |
| Mouse Oncostatin M Arrestor | CAAAACCTGAGAGAC-3'NH2              | 1825 |
| Mouse Oncostatin M Arrestor | CAAAACCTGAGAGAC-3'NH2              | 1826 |
| Mouse Oncostatin M Probe    | FI-CTCTCTCGTCTCTCAGGTTTGG          | 1827 |
| Mouse Oncostatin M Probe    | CTCTCTCGTCTCTCAGGTTTGG-NH2         | 1828 |
| Mouse Oncostatin M Invader  | GGCAGCTCTCAGGTCAGGTGTGA            | 1829 |
| Mouse Oncostatin M Slacker  | GAGGCGGATATAGGGCT- Biotin TEG      | 1830 |
| HUMAN ONCOSTATIN M          |                                    |      |
| Human Oncostatin M Probe    | CTCTCTCGTCTCTCAGGACTTAA            | 1831 |
| Human Oncostatin M Probe    | CTCTCTCGTCTCTCAGGACTTAA            | 1832 |
| Human Oncostatin M Invader  | GAAACAGGAGTGCAAGGACGAGACA          | 1833 |
| Human Oncostatin M Probe    | TCACGTCTCTCAGGTTTGG                | 1834 |
| Human Oncostatin M Probe    | GTCAGGTCTCTCAGGTTTGG               | 1835 |
| Human Oncostatin M Probe    | AGTCACGTCTCTCAGGTTTGG              | 1836 |
| Human Oncostatin M Probe    | CAGTCACGTCTCTCAGGTTTGG             | 1837 |
| Human Oncostatin M Invader  | AGGCAGCTCTCAGGTCAGGTGTGA           | 1838 |
| FRET Probe 1                | FI-CAAC(CY3)GCTTCCTCCG             | 1839 |
| SRT                         | CGGAGGAAGCAGTTGGAGACGTGACTGIGG-NH2 | 1840 |
| SRT with mismatch           | CGGAGGAAGCAGTTGGAGACGTGACTGIGG-NH2 | 1841 |
| SRT with mismatch           | CGGAGGAAGCAGTTGGAGACGTGACTGIGG-NH2 | 1842 |



bold indicates 2' o-methyl bases

| Oligo Type         | Oligo Sequence                         | Oligo #   | SEQ ID NO |
|--------------------|--|-----------|-----------|
| SECONDARY SYSTEM:  |  |           |           |
| SET 1              |  |           |           |
| FRET probe 1       | 5'-F-CAAC(CY3)GCTTCCTCCG-3'            | DB04001F6 | 1843      |
| secondary target   | 5'-CGGAAGAAGCAGTTGGTGGCGCTCGTTAA-NH2   | 649-10-01 | 1844      |
| SET 2              |  |           |           |
| FRET probe 1       | 5'-F-CAAC(CY3)GCTTCCTCCG-3'            | DB04001F6 | 1845      |
| secondary target   | 5'-CGGAAGAAGCAGTTGGAGGCGTGACGGT-NH2-3' | 641-60-03 | 1846      |
| h2C19 designs 2    |  |           |           |
| probe              | 5'-AACGAGGCGCAGATGCCATCGA-NH2-3'       | 971-26-09 | 1847      |
| stacker            | 5'-TCTTGGGTGTTCTTTACTTTCTC-3'          | 971-26-12 | 1848      |
| invader            | 5'-GCAATCAATAAAGTCCCGAGGGTTGTTTC       | 971-26-11 | 1849      |
| arrestor           | 5'-TCGATGGACATCGTGCGC-3'               | 971-26-10 | 1850      |
| SET 1              |  |           |           |
| h 2D6 p450 designs |  |           |           |
| probe              | 5'-CCGTCACGCCCTCTCACCCATCT-NH2-3'      | 971-11-01 | 1851      |
| stacker            | 5'-CTGGTCGCCGCACCT-3'                  | 971-11-04 | 1852      |
| invader            | 5'-TGAGGGCATGTGAGCCTGGA-3'             | 971-11-03 | 1853      |
| arrestor           | 5'-AGATGGGAGAGAGGCG-3'                 | 971-11-02 | 1854      |
| SET 2              |  |           |           |
| probe              | 5'-CCGTCACGCCCTCGAAGCCCTGT-NH2-3'      | 971-11-05 | 1855      |
| stacker            | 5'-ACTTCGATGTCACGGGATGTCATATGG-3'      | 971-11-08 | 1856      |
| invader            | 5'-GAGTGTCGTTCCCTTAGGGATGCGC-3'        | 971-11-08 | 1857      |
| arrestor           | 5'-ACAGGGCTTCGAGGCG-3'                 | 971-11-06 | 1858      |
| SET 2              |  |           |           |
| probe              | 5'-CCGTCACGCCCTCCCTGCTGAGAAAG-NH2-3'   | 971-11-09 | 1859      |
| stacker            | 5'-GCAGGAAGGCCTCCG-3'                  | 971-11-12 | 1860      |
| invader            | 5'-CCCAGGCATGCACGGCGGA-3'              | 971-11-11 | 1861      |
| arrestor           | 5'-CTTTCTCAGCAGGGAGGCG-3'              | 971-11-10 | 1862      |
| SET 2              |  |           |           |

h 2D6 shroter designs

|          |                                    |            |      |
|----------|------------------------------------|------------|------|
| probe    | 5'-CCGTCACGCCTCCCTGCTGAGAAA-HEX-3' | 1051-12-06 | 1863 |
| probe    | 5'-CCGTCACGCCTCCCTGCTGAGAAA-3'     | 1051-12-05 | 1864 |
| probe    | 5'-CCGTCACGCCTCCCTGCTGAGAAA-NH2-3' | 971-38-01  | 1865 |
| invader  | 5'-CCCGAGGCATGCACGGCGGA-3'         | 971-11-11  | 1866 |
| stacker  | 5'-GGCAGGAAGGCCTCC-3'              | 971-38-03  | 1867 |
| arrestor | 5'-TTTCTCAGCAGGGAGGCG-3'           | 971-38-02  | 1868 |
| SET 2    |                                    |            |      |

|          |                                  |           |      |
|----------|----------------------------------|-----------|------|
| probe    | 5'-CCGTCACGCCTCCCTGCTGAGA-NH2-3' | 971-38-07 | 1869 |
| invader  |                                  | 971-11-11 |      |
| stacker  | 5'-AAGGCAGGAAGGCCTCC-3'          | 971-38-09 | 1870 |
| arrestor | 5'-TCTCAGCAGGGAGGCG-3'           | 971-38-08 | 1871 |
| SET 2    |                                  |           |      |

|          |                                   |           |      |
|----------|-----------------------------------|-----------|------|
| probe    | 5'-CCGTCACGCCTCCCTGCTGAGAA-NH2-3' | 971-38-04 | 1872 |
| invader  |                                   | 971-11-11 |      |
| stacker  | 5'-AGGCAGGAAGGCCTGG-3'            | 971-38-06 | 1873 |
| arrestor | 5'-TTCTCAGCAGGGAGGCG-3'           | 971-38-05 | 1874 |
| SET 2    |                                   |           |      |

|          |                                     |           |      |
|----------|-------------------------------------|-----------|------|
| probe    | 5'-CCGTCACGCCTCCCTGCTGAGAAAG-NH2-3' | 971-11-09 | 1875 |
| invader  |                                     | 971-11-11 |      |
| stacker  | 5'-GCAGGAAGGCCTCCG-3'               | 971-11-12 | 1876 |
| arrestor | 5'-CTTCTCAGCAGGGAGGCG-3'            | 971-11-10 | 1877 |
| SET 2    |                                     |           |      |

h 2B6 p450 alt. Splice designs

|          |                                  |            |      |
|----------|----------------------------------|------------|------|
| probe    | 5'-AACGAGGCGCACCATATCCC-NH2-3'   | 1051-48-01 | 1878 |
| invader  | 5'-CCAGCGGTTCCATTGGCAAAGATCAA-3' | 971-01-03  | 1879 |
| stacker  | 5'-CGGAAGAATGGTCCGACCATG-3'      | 971-01-04  | 1880 |
| arrestor | 5'-GGGATATGGTGGTGCGC-3'          | 1051-48-02 | 1881 |
| SET 1    |                                  |            |      |

|          |                                   |            |      |
|----------|-----------------------------------|------------|------|
| probe    | 5'-CCGTCACGCCTCCACCATATCCG-HEX-3' | 1051-12-02 | 1882 |
| probe    | 5'-CCGTCACGCCTCCACCATATCCC-3'     | 1051-12-01 | 1883 |
| probe    | 5'-CCGTCACGCCTCCACCATATCCC-NH2-3' | 971-01-01  | 1884 |
| invader  |                                   | 971-01-03  |      |
| stacker  |                                   | 971-01-04  |      |
| arrestor | 5'-GGGATATGGTGGAGGCG-3'           | 971-01-02  | 1885 |



SET 2

probe  
invader  
stacker  
arrestor  
SET 1

5'-AACGAGGGCGCACCAGAGCTGATGAG-NH2-3'  
5'-GAGAAAGAGCTCAAAACAGCTGGCCGAATAA-3'  
5'-TGAAAAAGTCTGGTAGAACAAAGTTCAGC-3'  
5'-CTCATCAGCTCTGGTGCGG-3'

1051-48-03  
971-01-10  
971-01-11  
1051-48-04

1886  
1887  
1888  
1889

probe

5'-CCGTCACGCGCTCCAGAGCTGATGAG-NH2-3'

971-01-08  
971-01-10  
971-01-11  
971-01-09

1890

SET 2

5'-CTCATCAGCTCTGGAGGCG-3'

1891

h 2B6 p450 alt splice designs2

p  
l  
s  
a  
SET 1

5'-AACGAGGGCGCACCCCTTGGATTTC-NH2-3'  
5'-CTGTTCAATCTCCCTGTAGACTCTCTA-3'  
5'-CGAAGCTCCTCTATCAG-3'  
5'-GAAATCCAAGGGTGCGC-3'

1051-48-05  
1051-48-10  
1051-48-09  
1051-48-06

1892  
1893  
1894  
1895

p  
l  
s  
a  
SET 2

5'-CCGTCACGCGCTCCCTTGGATTTC-NH2-3'  
5'-GAAATCCAAGGGAGGCG-3'

1051-48-07  
1051-48-10  
1051-48-09  
1051-48-08

1896  
1897

p  
l  
s  
a  
SET 1

5'-AACGAGGGCGCACTGAGGGCC-NH2-3'  
5'-GGAAGAGGAAGGTGGGTCCAA-3'  
5'-CCCTTGGATTCCGAAG-3'  
5'-GGCCCTCAGTGCGC-3'

1051-48-11  
1051-48-16  
1051-48-15  
1051-48-12

1898  
1899  
1900  
1901

p  
l  
s  
a  
SET 2

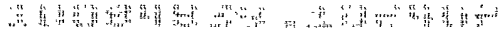
5'-CCGTCACGCGCTCTGAGGGCC-NH2-3'  
5'-GGCCCTCAGAGGCG-3'

1051-48-13  
1051-48-16  
1051-48-15  
1051-48-14

1902  
1903

h2B6 p450 alt. Splice designs4

1051-48-17  
1051-48-18  
1051-48-19  
1051-48-20  
1051-48-21  
1051-48-22  
1051-48-23  
1051-48-24  
1051-48-25  
1051-48-26  
1051-48-27  
1051-48-28  
1051-48-29  
1051-48-30  
1051-48-31  
1051-48-32  
1051-48-33  
1051-48-34  
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1051-48-67  
1051-48-68  
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1051-48-72  
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1051-48-90  
1051-48-91  
1051-48-92  
1051-48-93  
1051-48-94  
1051-48-95  
1051-48-96  
1051-48-97  
1051-48-98  
1051-48-99  
1051-48-100



|                   |                                       |            |      |
|-------------------|---------------------------------------|------------|------|
| probe             | 5'-AACGAGGCGCACAAATACAGAGCTG-NH2-3'   | 1051-48-17 | 1904 |
| invader           | 5'-GAGAAAGAGCTCAAAACAGCTGGCGCG-3'     | 1051-48-22 | 1905 |
| stacker           | 5'-ATAGTGAAAAAAGTCTGGTAGAAC-3'        | 1051-48-21 | 1906 |
| arrestor          | 5'-CAGCTCTGTATTGTGCGC-3'              | 1051-48-18 | 1907 |
| SET 1             |                                       |            |      |
| probe             | 5'-CCGTCACGCCTCAATACAGAGCTG-NH2-3'    | 1051-48-19 | 1908 |
| invader           |                                       | 1051-48-22 |      |
| stacker           |                                       | 1051-48-21 |      |
| arrestor          | 5'-CAGCTCTGTATTGAGGCG-3'              | 1051-48-20 | 1909 |
| SET 2             |                                       |            |      |
| probe             | 5'-AACGAGGCGCACGGTTGAGGTTCTG-NH2-3'   | 1051-48-23 | 1910 |
| invader           | 5'-CAGCAAAAGAGCGAGAGCGTTGAC-3'        | 1051-48-28 | 1911 |
| stacker           | 5'-GTGGCTGAATTCACGTG-3'               | 1051-48-27 | 1912 |
| arrestor          | 5'-CAGAACCTCAACCGTGCGC-3'             | 1051-48-24 | 1913 |
| SET 1             |                                       |            |      |
| probe             | 5'-CCGTCACGCCTCGGTTGAGGTTCTG-NH2-3'   | 1051-48-25 | 1914 |
| invader           |                                       | 1051-48-28 |      |
| stacker           |                                       | 1051-48-27 |      |
| arrestor          | 5'-CAGAACCTCAACCGAGGCG-3'             | 1051-48-26 | 1915 |
| SET 2             |                                       |            |      |
| h2B6 p450 designs |                                       |            |      |
| probe             | 5'-CCGTCACGCCTCCACCATATCCCCG-NH2-3'   | 971-01-06  | 1916 |
| invader           | 5'-CCGTCACGCCTCCACCATATCCC-NH2-3'     | 971-01-03  | 1917 |
| stacker           | 5'-CGGAAGAATGGGTGCGAC-3'              | 971-01-05  | 1918 |
| stacker           | 5'-CGGAAGAATGGGTGCGACCATG-3'          | 971-01-04  | 1919 |
| arrestor          | 5'-GGGATATGTTGGAGGCG-3'               | 971-01-02  | 1920 |
| SET 2             |                                       |            |      |
| probe             | 5'-CCAGCGGTTTCCATTGGCAAGATCAA-3'      | 971-01-01  | 1921 |
| invader           |                                       | 971-01-03  |      |
| arrestor          | 5'-CGGGGATATGTTGGAGGCG-3'             | 971-01-07  | 1922 |
| SET 2             |                                       |            |      |
| probe             | 5'-CCGTCACGCCTCCAGAGCTGATGAG-NH2-3'   | 971-01-08  | 1923 |
| invader           | 5'-GAGAAAGAGCTCAAAACAGCTGGCCGAATAA-3' | 971-01-10  | 1924 |
| stacker           | 5'-TGAAAAAGTCTGGTAGAACAAAGTTCAGC-3'   | 971-01-11  | 1925 |



arrestor  
SET 2  
5'-CTCATCAGCTCTGGAGGCG-3'

1926

h2b6p450 designs 2

probe  
invader  
stacker  
arrestor  
SET 2  
5'-CCGTCACGCCTCAGATGACTGCC-NH2-3'  
5'-GGAGAAGGTCGGAAATCTCTGAATCTCATC-3'  
5'-TCTGTGTATGGCATTTTGGCTCGG-3'  
5'-GGCAGTCATCTGAGGCG-3'

1927  
1928  
1929  
1930

h 2C19 designs 1

probe  
invader  
stacker  
arrestor  
SET 2  
5'-CCGTCACGCCTCCATCCTTAATATCTAT-NH2-3'  
5'-GAGAGATTGGTTAAGGATTTGCTGAA-3'  
5'-CTGTAGGATATTTCCAATCACTGGG-3'  
5'-ATAGATATTAAGGATGAGGCG-3'

1931  
1932  
1933  
1934

probe  
invader  
stacker  
arrestor  
SET 1

5'-AACGAGGGCGCACCGTTCCAGGC-NH2-3'  
5'-CATATCCATGCAGCACCCACCATGA-3'  
5'-CAAAATACAGAGTGAACACAGGGCC-3'  
5'-GCCTGGAACGGTGCGC-3'

1935  
1936  
1937  
1938

h2C19 shorter site 2 designs

probe  
invader  
stacker  
arrestor  
SET 1  
5'-AACGAGGGCGCACCGTTCCAGGC-NH2-3'  
5'-CATATCCATGCAGCACCCACCATGA-3'  
5'-CCAAAATACAGAGTGAACACAGGGCC-3'  
5'-CCTGGAACGGTGCGC-3'

1939  
1940  
1941  
1942

probe  
probe  
probe  
invader  
stacker  
arrestor  
SET 1

5'-AACGAGGGCGCACCGTTCCAGGC-NH2-3'  
5'-AACGAGGGCGCACCGTTCCAGGC-3'  
5'-AACGAGGGCGCACCGTTCCAGGC-HEX-3'  
5'-CAAAATACAGAGTGAACACAGGGCC-3'  
5'-GCCTGGAACGGTGCGC-3'

1943  
1944  
1945  
1946  
1947

rat 1A1, rat 1A2  
probe

Rat 1A1 site 1 bs. 639-700  
5'-CCGTCACGCCTCAGATTGACTATGCTG-NH2-3'

1948

1939 1940 1941 1942 1943 1944 1945 1946 1947 1948



1949  
1950  
1951

500-58-03  
500-58-04  
500-58-02

5'-CAGTAACCTCCCAAACTCATTGCTTC-3'  
5'-AGCAGCTCTTGGTCATCGT-3'  
5'-CAGCATAGTCAATCTGAGGCG-3'

invader  
stacker  
arrestor  
SET 2

1952  
1953  
1954  
1955

500-58-05  
500-58-07  
500-58-08  
500-53-06

Rat 1A2 site 1 bs. 674-725  
5'-AACGAGGCGCACTGACATTCTCCAC-NH2-3'  
5'-GTCCACAGCATTCCCTGAGGA-3'  
5'-AAAGTCCTTGCTGCTCTTC-3'  
5'-GTGGAGAAATGTCAGTGCGC-3'

rat 1A2  
probe  
invader  
stacker  
arrestor  
SET 1

1956  
1957  
1958  
1959

500-49-05  
500-49-03  
r2B1, 2B2 500-49-07  
500-49-06

5'-AACGAGGCGCACTGGCTTGACACA-NH2-3'  
5'-GTCAATGTCTTGGAGCCAAA-3'  
5'-GAGAAGTTCTGGAGGATGGTGG-3'  
5'-TGTGTCAAGCCAGTGCGC-3'

rat 2B1-2B2 patent  
probe  
invader  
stacker  
arrestor  
SET 1

1960  
1961  
1962

500-49-01  
500-49-03  
r2B1, 2B2 500-49-04  
500-49-02

5'-AACGAGGCGCACTGGCTTGACACAG-NH2-3'  
5'-AGAAGTTCTGGAGGATGGTGG-3'  
5'-CTGTGTCAAGCCAGTGCGC-3'

probe  
invader  
stacker  
arrestor  
SET 1

1963  
1964  
1965  
1966

500-49-12  
500-49-10  
500-49-14  
500-49-13

PROBE SET 2 (r2B1 bs 1299-1353, r2B2 bs. 474-528)  
5'-AACGAGGCGCACGAGGAACAATTTCATT-NH2-3'  
5'-GTTCTGGAGGATGGTGAAGAAC-3'  
5'-CGGGCAATGCCTTCG-3'  
5'-AAATGAATTGTTCTCGTGCGC-3'

rat 2B1-2B2 site 4  
probe  
invader  
stacker  
arrestor  
SET 2

1967  
1968  
1969

500-49-08  
500-49-10  
500-49-11  
500-49-09

5'-AACGAGGCGCACGAGGAACAATTTCATT-NH2-3'  
5'-GGGCAATGCCTTCG-3'  
5'-GAAATGAATTGTTCTCGTGCGC-3'

probe  
invader  
stacker  
arrestor  
SET 1

1970

500-49-15

5'-AACGAGGCGCACAGCTGAGAGCAG-NH2-3'

rat 2B1-2B2 ,5 patent  
probe





invader 5'-GCCTCAGCCGGATCACCGC-3' 1971  
invader 5'-GCCTCAGCCCGATCACCGC-3' 1972  
stacker 5'-ATCTGGTACGTTGGAGGTATT-3' 1973  
stacker 5'-ATCTGGTATGTTGGAGGTATT-3' 1974  
arrestor 5'-CTGCTTCTCAGCTCTGCCG-3' 1975  
NOTE: all 3 invader/probe sets are designed to detect both 2B1 and 2B2  
SET 1

r2B1, 500-49-17  
r2B2, 500-49-18  
r2B1 500-49-20  
r2B2 500-49-21  
500-49-16

rat 2E1 p450 (af061442) 500-73 Rat 2E1 PROBE SET (570C)  
p 5'-CCGTCACGCCCTCGTCGAAACGTTTGT-NH2 1976  
i 5'-CCTCAGACACTTCTTGTCATTGTAC-3' 1977  
s 5'-GAAGAGGATATCCGCAATGACATTGC-3' 1978  
a 5'-AACAAACGTTTCGACGAGGCG-3' 1979  
SET 2

500-40-04  
500-40-02  
500-40-05  
500-40-06

p 5'-CCGTCACGCCCTCGTCGAAACGTTTGTGAAG-NH2-3' 1980  
i  
s  
a  
SET 2 5'-CTTCAACAAACGTTTCGACGAGGCG-3' 1981

500-40-01  
500-40-02  
500-40-05  
500-40-03

rat 2E1 p450 (af061442) 500-73 Rat 2E1 PROBE SET (822G) (designed over splice junction #5)  
p 5'-CCGTCACGCCCTCCTCCATCTCTATG-NH2-3' 1982  
i 5'-GTTCTTGGCTGTGTTTCCCTTA-3' 1983  
s 5'-AGGAGACAGTCAGTCACATC-3' 1984  
a 5'-CATAGAGATGGAGGAGGCG-3' 1985  
SET 2

500-40-10  
500-40-08  
500-40-11  
500-40-12

p 5'-CCGTCACGCCCTCCTCCATCTCTATGAG-NH2-3' 1986  
i  
s  
a  
SET 2 5'-CTCATAGAGATGGAGGAGGCG-3' 1987

500-40-07  
500-40-08  
500-40-11  
500-40-09

Rat 2E1 PROBE SET (969G) Designed over splice junction #6  
probe 5'-CCGTCACGCCCTCCTCTTCAATTTCTG-HEX-3' 1988  
invader 5'-CCCTGTCAATTTCTTCATGAAGTTTA-3' 1989  
stacker 5'-GGTATTTTCATGAGGATCAGGAGC-3' 1990  
arrestor 5'-CCAGAAATTGAAGAGGAGGCG-3' 1991  
SET 2

1073-19-06  
500-40-14  
500-40-17  
500-40-15



|                          |                                       |                                 |      |
|--------------------------|---------------------------------------|---------------------------------|------|
| probe                    | 5'-CCGTCACGCCCTCCTCTTCAATTTCTG-3'     | 1073-19-05                      | 1992 |
| probe                    | 5'-CCGTCACGCCCTCCTCTTCAATTTCTG-NH2-3' | 500-40-16                       | 1993 |
| probe                    | 5'-CCGTCACGCCCTCCTCTTCAATTTCTGG-NH2   | 500-40-13                       | 1994 |
| invader                  |                                       | 500-40-14                       |      |
| stacker                  |                                       | 500-40-17                       |      |
| arrestor                 |                                       | 500-40-18                       | 1995 |
| SET 2                    |                                       |                                 |      |
| Rat 2E1 PROBE SET (969G) | Designed over splice junction #6      |                                 |      |
| probe                    | 5'-CCGTCACGCCCTCCTCTTCAATTTCT-NH2-3'  | 500-73-01                       | 1996 |
| invader                  | 5'-CCCTGTCAATTTCTTCATGAAGTTTA-3'      | 500-40-14                       | 1997 |
| stacker                  | 5'-GGGTATTTTCATGAGGATCAGGAG-3'        | 500-73-03                       | 1998 |
| arrestor                 | 5'-AGAAATTGAAGAGGAGGCG-3'             | 500-73-02                       | 1999 |
| SET 2                    |                                       |                                 |      |
| rat 3A's design 2        |                                       |                                 |      |
| probe                    | 5'-CCGTCACGCCCTCGTTCTGGGT-NH2-3'      | 500-43-15                       | 2000 |
| invader                  | 5'-GAGCAAACTCATGCCAATGCAC-3'          | r3A1, 3A18 500-43-23            | 2001 |
| invader                  | 5'-GAGCAAACTCATGTCAATGCAC-3'          | r3A2 500-43-24                  | 2002 |
| invader                  | 5'-GAGCAAACTCATGCCAATACAC-3'          | r3A2 500-43-24                  | 2003 |
| stacker                  | 5'-CCATTTCCAAAGGGCAG-3'               | short r3A1, 3A2, 3A18 500-43-19 | 2004 |
| stacker                  | 5'-CCATTTCCAAAGGGCAG-3'               | short r3A9 500-43-20            | 2005 |
| arrestor                 | 5'-ACCCAGGAACGAGGCG-3'                | 500-43-16                       | 2006 |
| SET 2                    |                                       |                                 |      |
| probe                    | 5'-CCGTCACGCCCTCGTTCTGGGT-NH2-3'      | 500-43-13                       | 2007 |
| invader                  |                                       | r3A1, 3A18 500-43-23            |      |
| invader                  |                                       | r3A2 500-43-24                  |      |
| arrestor                 |                                       | 500-43-14                       | 2008 |
| SET 2                    |                                       |                                 |      |
| rat 3A's desing 3        |                                       |                                 |      |
| probe                    | 5'-CCGTCACGCCCTCTGAGAGCAAACT-NH2-3'   | 500-43-29                       | 2009 |
| invader                  | 5'-AGAGCGAGTTTCATATTCAA-3'            | r3A1, 3A2 500-43-35             | 2010 |
| invader                  | 5'-AGAGCAAACTTCATGTCAA-3'             | r3A9 500-43-36                  | 2011 |
| invader                  | 5'-ACAGCAAGTTTCATGCTGAA-3'            | r3A18 500-43-37                 | 2012 |
| stacker                  | 5'-CATGCCAATGCAGTTCCTG-3'             | r3A1, 3A18 500-43-31            | 2013 |
| stacker                  | 5'-CATGTCAATGCAGTTCCTG-3'             | r3A2 500-43-32                  | 2014 |
| stacker                  | 5'-CATGCCAATACAGTTCCTG-3'             | r3A9 500-43-33                  | 2015 |

1073-19-05  
500-40-16  
500-40-13  
500-40-14  
500-40-17  
500-40-18  
500-73-01  
500-40-14  
500-73-03  
500-73-02  
500-43-15  
r3A1, 3A18 500-43-23  
r3A2 500-43-24  
r3A2 500-43-24  
short r3A1, 3A2, 3A18 500-43-19  
short r3A9 500-43-20  
500-43-16  
500-43-13  
r3A1, 3A18 500-43-23  
r3A2 500-43-24  
500-43-14  
500-43-29  
r3A1, 3A2 500-43-35  
r3A9 500-43-36  
r3A18 500-43-37  
r3A1, 3A18 500-43-31  
r3A2 500-43-32  
r3A9 500-43-33



|   |  |  |              |
|---|--|--|--------------|
| arrestor<br>SET 2   | 5'-AGGTTTGCTCTCCGAGGCG-3'              | 500-43-30  | 2016         |
| probe<br>invader<br>invader<br>invader<br>arrestor<br>SET 2   | 5'-CCGTACAGCCCTCTGAGAGCAACCTCA-NH2-3'  | 500-43-27<br>r3A1, 3A2 500-43-35<br>r3A9 500-43-36<br>r3A18 500-43-37<br>500-43-28 | 2017         |
| rat 3A's designs<br>probe<br>invader<br>invader<br>invader<br>s<br>s<br>a<br>SET 2                      | 5'-TGAGGTTTGCTCTCAGAGGCG-3'            |  | 2018         |
|   | 5'-CCGTACAGCCCTCGGAACATCTCCT-NH2-3'    | 500-43-03  | 2019         |
|   | 5'-TGCTCCATAGTTCAATGATGGC-3'           | r3A1, 3A2 500-43-09  | 2020         |
|   | 5'-TATCTGTATAGTTAATGATGGC-3'           | r3A9 500-43-10   | 2021         |
|   | 5'-TATCTCCATAGTTCTCATGAGGGC-3'         | r3A18 500-43-11  | 2022         |
|   | 5'-TGAGTCTTCCACTGGTG-3'                | r3A1, 3A2 500-43-05  | 2023         |
|   | 5'-TGAGCTTCCACTGGTG-3'                 | r3A9 500-43-06   | 2024         |
|   | 5'-TGAGTTGCCACTGGTG-3'                 | r3A18 500-43-07  | 2025         |
| probe<br>invader<br>invader<br>invader<br>arrestor<br>SET 2   | 5'-CCGTACAGCCCTCGGAACATCTCCTTGA-NH2-3' | 500-43-01<br>r3A1, 3A2 500-43-09<br>r3A9 500-43-10<br>r3A18 500-43-11<br>500-43-02 | 2026         |
|   | 5'-TCAAGGAGATGTTCCGAGGCG-3'            |  | 2027         |
| rat 3A's design 2b<br>probe<br>invader<br>invader<br>invader<br>stacker<br>stacker<br>arrestor<br>SET 2 | 5'-CCGTACAGCCCTCGTTCTGGG-NH2-3'        | 991-39-01  | 2028         |
|   | 5'-GAGCAAACTCATGCCAATGCAC-3'           | r3A1, 3A18 500-43-23   | 2029         |
|   | 5'-GAGCAAACTCATGTCAATGCAC-3'           | r3A2 500-43-24   | 2030         |
|   | 5'-GAGCAAACTCATGCCAATACAC-3'           | r3A9 500-43-25   | 2031         |
|   | 5'-TCCATTTCCAAAGGGCAG-3'               | r3A1, 3A2, 3A18 991-39-03  | 2032         |
|   | 5'-TCCATTTCCAAAGGGCAG-3'               | r3A9 991-39-04   | 2033         |
|   | 5'-CCCAGGAACGAGGCG-3'                  | 991-39-02  | 2034         |
| rat or human 1A1 shorter site 2<br>probe<br>probe   | 5'-CCGTACAGCCCTCCTGTCTGTGAT-HEX-3'     | 1073-19-02<br>1073-19-01   | 2035<br>2036 |

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probe 5'-CCGTCACGCCCTCCTGTCTGTGAT-NH2-3' 991-12-04 2037  
invader 5'-TCCTGACAATGCTCAATGAGGA-3' r 1A1 500-53-11 2038  
invader 5'-TCCTGACAGTGCTCAATCAGGA-3' h 1A1 500-53-12 2039  
stacker 5'-GTCCCGGATGTGGCCC-3' rat/human 1A1 991-12-06 2040  
arrestor 5'-ACATCACAGACAGGAGGCG-3' 500-53-10 2041  
SET 2

probe 5'-CCGTCACGCCCTCCTGTCTGTGATG-NH2-3' 991-12-01 2042  
invader r 1A1 500-53-11  
invader h 1A1 500-53-12  
stacker rat/human 1A1 991-12-03 2043  
arrestor 991-12-02 2044  
SET 2

probe 5'-CCGTCACGCCCTCCTGTCTGTGATG-NH2-3' 500-53-09 2045  
invader r 1A1 500-53-11  
invader h 1A1 500-53-12  
stacker rat/human 1A1 991-12-06 2046  
arrestor 991-12-05 2047  
SET 2

rat or human 1A1 site 1  
probe 5'-CCGTCACGCCCTCTGGCCCTTC-NH2-3' 500-53-04 2048  
invader 5'-CTGTCTGTGATGCCGGATGA-3' 500-53-03 2049  
stacker 5'-TCAAATGTCCTGTAGTGCTC-3' rat 1A1 500-53-06 2050  
stacker 5'-TCAAAGGTTTGTAGTGCTC-3' human 1A1 500-53-07 2051  
arrestor 5'-GAAGGGCCAGAGGCG-3' 500-53-05 2052  
SET 2

probe 5'-CCGTCACGCCCTCTGGCCCTTCTC-NH2-3' 500-53-01 2053  
invader 500-53-03  
arrestor 500-53-02 2054  
SET 2

Rat/Human 1A1 site 2  
probe 5'-CCGTCACGCCCTCCTGTCTGTGATG-NH2-3' 500-53-09 2055  
invader r 1A1 500-53-11  
invader h 1A1 500-53-12 2056  
stacker rat/human 1A1 500-53-14 2057  
arrestor 5'-CCCGGATGTGGCCCT-3' 500-53-10 2058  
5'-ACATCACAGACAGGAGGCG-3' 2059



SET 2

rat or human 1A2 sites

probe

probe

probe

invader

invader

arrestor

SET 1

5'-AACGAGGGCGCACGGACTGTTTTCTGC-HEX-3'  
5'-AACGAGGGCGCACGGACTGTTTTCTGC-3'  
5'-AACGAGGGCGCACGGACTGTTTTCTGC-NH2-3'  
5'-CTTGTTGAAGTCTTGATAGTGTCTCTC-3'  
5'-CTTGTCAAAGTCTGATAGTGTCTCTC-3'  
5'-GCAGAAAAACAGTCCGTGCGC-3'

1073-19-04  
1073-19-03  
500-53-15  
rat 1A2 500-53-17  
human 1A2 500-53-18  
500-53-16

2060  
2061  
2062  
2063  
2064  
2065

shorter h2C19 design site 3

probe

invader

stacker

arrestor

SET 1

5'-AACGAGGGCGCACGGATGTCCATCG-NH2-3'  
5'-GCAATCAATAAAGTCCCGAGGGTGTTC-3'  
5'-ATTCTTGGTGTCTTTTACTTTCTC-3'  
5'-CGATGGACATCGTGCGC-3'

971-48-01  
971-26-11  
971-48-03  
971-48-02

2066  
2067  
2068  
2069

1073-19-04 1073-19-03 500-53-15 rat 1A2 500-53-17 human 1A2 500-53-18 500-53-16



## Human IL-10

| Oligo Type | Sequence                         | Oligo Number | Secondary Cassette | Comments   | SEQ ID NO |
|------------|----------------------------------|--------------|--------------------|--|-----------|
| probe      | aacgagggcgacaaactcactcatggt-NH2  | 511-31-01    | FV-1 & FV-2        | 3' amine   | 2070      |
| arrestor   | agccatgagtgagttgttgcc            | 511-31-02    |                    | All 2'Ome + 3' amine arrestor for 511-31-01          | 2071      |
| probe      | aacgagggcgacaaactcactcatggt-NH2  | 511-30-01    | FV-1 & FV-2        | 3' amine   | 2072      |
| arrestor   | gccaagagtgagttgttgcc             | 511-30-02    |                    | All 2'Ome + 3' amine arrestor for 511-30-01          | 2073      |
| arrestor   | gccaagagtgagttgttgcc             | 380-89-02    |                    | All 2'Ome Same as 380-82-02                          | 2074      |
| arrestor   | gccaagagtgagttgttgcc             | 380-89-04    |                    | All 2'Ome Same as 380-82-04                          | 2075      |
| arrestor   | gccaagagtgagttgttgcc             | 380-89-06    |                    | All 2'Ome Same as 380-82-06                          | 2076      |
| arrestor   | gccaagagtgagttgttgcc             | 380-89-08    |                    | All 2'Ome Same as 380-82-08                          | 2077      |
| probe      | aacgagggcgacaaactcactcatggt-NH2  | 511-67-01    | FV-1 & FV-2        | 3' amine   | 2078      |
| stacker    | cttgatcaatgcctctcttgagc          | 781-79-01    |                    | stacker for 511-67-01 All 2'Ome                      | 2079      |
| arrestor   | ccatgagtgagttgttgcc              | 781-79-02    | FV-1 & FV-2        | all 2'Ome arrestor for 511-67-01                     | 2080      |
| probe      | aacgagggcgacaaactcactcatggt-NH2  | 781-80-01    |                    | 3' amine   | 2081      |
| stacker    | gcttgatcaatgcctctcttgag          | 781-80-02    |                    | stacker for 781-80-01 All 2'Ome                      | 2082      |
| arrestor   | catgagtgagttgttgcc               | 781-80-03    | FV-1 & FV-2        | all 2'Ome arrestor for 781-80-01                     | 2083      |
| probe      | aacgagggcgacaaactcactcatggt-NH2  | 781-81-01    |                    | 3' amine   | 2084      |
| stacker    | ggctttatcatgctctcttgga           | 781-81-02    |                    | stacker for 781-81-01 All 2'Ome                      | 2085      |
| stacker    | ggctttatcatgctctcttgga           | 938-74-01    |                    | stacker for 781-81-01 All 2'Ome to replace 781-81-02 | 2086      |
| arrestor   | atgagtgagttgttgcc                | 781-81-03    |                    | all 2'Ome arrestor for 781-81-01                     | 2087      |
| probe      | ccgttcacgctcccaactcactcatggt-NH2 | 938-46-02    | MO4-1/MO4-2/MO4-3  | same as 938-46-01 w/ 3' amine                        | 2088      |
| arrestor   | atgagtgagttgttgagcc              | 938-46-03    |                    | all 2'Ome arrestor for 938-46-01&02                  | 2089      |
| invader    | taggctctatgagtgatgaagatga        | 380-59-02    |                    |  | 2090      |
| invader    | gtcatgaggtctatgagtgatgaagatga    | 511-32-01    |                    | longer invader 380-59-02                             | 2091      |

## Mouse IL-4

| Oligo Type | Sequence                         | Oligo Number | Secondary Cassette | Comments  | SEQ ID NO |
|------------|----------------------------------|--------------|--------------------|---|-----------|
| probe      | aacgagggcgacactctctctgagctctg    | 511-14-01    | FV-1 & FV-2        |   | 2092      |
| arrestor   | cgaggtcacagagagtgcc              | 511-14-02    |                    | All 2'Ome + 3' amine arrestor for 511-14-01                   | 2093      |
| probe      | aacgagggcgacactctctctgagct-NH2   | 511-12-01    | FV-1 & FV-2        | 458-34-01 with 3' amine                                       | 2094      |
| arrestor   | aggtcacagagagtgcc                | 511-02-01    | MO2                | All 2'Ome + 3' amine arrestor for 458-34-01                   | 2095      |
| arrestor   | cggtcacggtctctctctgagct-NH2      | 511-16-01    |                    | 3' amine  | 2096      |
| arrestor   | aggtcacagagagagagac              | 511-16-02    |                    | All 2'Ome + 3' amine arrestor for 511-16-01                   | 2097      |
| arrestor   | aggtcacagagagagagac              | 511-50-01    |                    | All 2'Ome + 3' amine arrestor for 511-16-01                   | 2098      |
| probe      | aacgagggcgacactctctctgagct       | 458-35-01    | MISC-1             |   | 2099      |
| arrestor   | aggtcacagagagagagac              | 511-03-01    |                    | All 2'Ome + 3' amine arrestor for 458-35-01                   | 2100      |
| probe      | ccagtgagctctctctgagct            | 458-35-02    | MISC-1             |   | 2101      |
| arrestor   | aggtcacagagagagagac              | 511-04-01    |                    | All 2'Ome + 3' amine arrestor for 458-36-01                   | 2102      |
| probe      | aacaccccgactctctctgagct          | 458-36-01    | MISC-2             |   | 2103      |
| probe      | aacgagggcgacactctctctgagcc       | 511-13-01    | FV-1 & FV-2        |   | 2104      |
| arrestor   | ggtcacagagagagagac               | 511-13-02    |                    |   | 2105      |
| probe      | aacgagggcgactctctctgag-NH2       | 781-71-01    | FV-1 & FV-2        | 3' amine  | 2106      |
| stacker    | ctctgttcaaatgacgatgactctc        | 781-71-02    |                    | All 2'Ome for 781-71-01                                       | 2107      |
| arrestor   | tcacagagagagagagac               | 781-71-03    |                    | All 2'Ome arrestor for 781-71-01                              | 2108      |
| invader    | atccatctctgcatggaggtcccta        | 380-32-01    |                    |   | 2109      |
| invader    | atccatctctgcatggaggtcccta        | 380-32-02    |                    | Same as 380-32-01 but underlined base is mismatch to sequence | 2110      |
| probe      | aacgagggcgacacccctctctctgagc-NH2 | 511-44-01    | FV-1 & FV-2        | 3' amine  | 2111      |
| arrestor   | gtcacagagagagagagagagag          | 511-44-02    |                    | All 2'Ome + 3' amine arrestor for 511-44-01                   | 2112      |
| probe      | aacgagggcgacacccctctctctg-NH2    | 511-68-01    | FV-1 & FV-2        | 3' amine  | 2113      |
| arrestor   | acagggagagagagagagagag           | 511-68-02    |                    | All 2'Ome + 3' amine arrestor for 511-68-01                   | 2114      |
| invader    | gtcacatcatctctctgcatggagagta     | 511-45-01    |                    |   | 2115      |
| probe      | ccgttcacgctctctctctgagctctg-NH2  | 511-46-01    | MO4-1/MO4-2/MO4-3  | 3' amine  | 2116      |



|          |                              |           |                   |  |      |
|----------|------------------------------|-----------|-------------------|--|------|
| arrestor | acagggatcacagagagagc         | 511-46-02 | MO4-1/MO4-2/MO4-3 | All 2'-Ome + 3' amine arrestor for 511-46-01 | 2117 |
| probe    | cagtcacgcctctctctctcct-NH2   | 511-69-01 |                   | 3' amine                                     | 2118 |
| arrestor | gggttcacagagagagagc          | 511-69-02 | MO4-1/MO4-2/MO4-3 | All 2'-Ome + 3' amine arrestor for 511-69-01 | 2119 |
| probe    | cagtcacgcctctctctctcct-NH2   | 781-68-01 |                   | 3' amine                                     | 2120 |
| stacker  | tggttcaaaaagtcgagatctctca    | 781-68-02 |                   | All 2'Ome stacker for 781-68-01              | 2121 |
| arrestor | gggttcacagagagagagc          | 781-68-03 |                   | All 2'-Ome arrestor for 781-68-01            | 2122 |
| probe    | cagtcacgcctctctctctcct-NH2   | 781-69-01 | MO4-1/MO4-2/MO4-3 | 3' amine                                     | 2123 |
| stacker  | ctcggttcaaaaagtcgagatctctca  | 781-69-02 |                   | All 2'Ome stacker for 781-69-01              | 2124 |
| arrestor | gtcacagagagagagc             | 781-69-03 |                   | All 2'-Ome arrestor for 781-69-01            | 2125 |
| invader  | acctccatctccggtgcagggctcctta | 511-47-01 |                   |  | 2126 |

|          |                            |           |     |  |      |
|----------|----------------------------|-----------|-----|--|------|
| probe    | cagtcacgcctctctctctcct-NH2 | 511-17-01 | MO2 | 3' amine                                     | 2127 |
| arrestor | aggagaagagagagagc          | 511-17-02 |     | All 2'-Ome + 3' amine arrestor for 511-17-01 | 2128 |
| invader  | gcacatccatctccggtgcagggcga | 511-18-01 |     |  | 2129 |

|          |                            |           |                   |                                   |      |
|----------|----------------------------|-----------|-------------------|-----------------------------------|------|
| probe    | cagtcacgcctctctctctcct-NH2 | 781-83-01 | TT-1/TT-2         | 3' amine                          | 2130 |
| arrestor | gggttcacagagagagc          | 781-83-02 |                   | All 2'-Ome arrestor for 781-83-01 | 2131 |
| probe    | cagtcacgcctctctctcct-NH2   | 781-82-01 | MO4-1/MO4-2/MO4-3 | 3' amine                          | 2132 |
| invader  | cagtcacgcctctctctcctca     | 781-82-02 |                   |                                   | 2133 |
| arrestor | gggttcacagagagagc          | 781-82-03 |                   | All 2'-Ome arrestor for 781-82-01 | 2134 |

|          |                          |           |                   |                                   |      |
|----------|--------------------------|-----------|-------------------|-----------------------------------|------|
| probe    | cagtcacgcctctctctcct-NH2 | 781-84-01 | MO4-1/MO4-2/MO4-3 | 3' amine                          | 2135 |
| invader  | cggatgggcgcctctctca      | 781-84-02 |                   |                                   | 2136 |
| arrestor | gggttcacagagagagc        | 781-84-03 |                   | All 2'-Ome arrestor for 781-84-01 | 2137 |

## Mouse IL-2

| Oligo Type | Sequence                        | Oligo Number | Secondary Cassette | Comments                                     |      |
|------------|---------------------------------|--------------|--------------------|--|------|
| probe      | cagtcacgcctctctctctcct-NH2      | 511-19-01    | MO2                | 3' amine                                     | 2138 |
| arrestor   | aggagaacgttgttgtaaacactaacagagc | 511-19-02    |                    | All 2'-Ome + 3' amine arrestor for 511-19-01 | 2139 |
| invader    | gcactcaaaagtggtgcagagccca       | 511-20-01    |                    |  | 2140 |

## Mouse IFN- $\gamma$

| Oligo Type | Sequence                   | Oligo Number | Secondary Cassette | Comments                                     |      |
|------------|----------------------------|--------------|--------------------|--|------|
| probe      | cagtcacgcctctctctctcct-NH2 | 511-24-01    | MO2                | 3' amine                                     | 2141 |
| arrestor   | gggaactggcaaaaagagagagc    | 511-24-02    |                    | All 2'-Ome + 3' amine arrestor for 511-24-01 | 2142 |
| probe      | cagtcacgcctctctctctcct-NH2 | 511-23-01    | MO2                | 3' amine                                     | 2143 |
| arrestor   | gaactggcaaaaagagagagc      | 511-23-02    |                    | All 2'-Ome + 3' amine arrestor for 511-23-01 | 2144 |
| probe      | cagtcacgcctctctctctcct-NH2 | 511-21-01    | MO2                | 3' amine                                     | 2145 |
| arrestor   | aactggcaaaaagagagagc       | 511-21-02    |                    | All 2'-Ome + 3' amine arrestor for 511-20-01 | 2146 |
| invader    | gtctgcaggatcttcagtcaccaa   | 511-22-01    |                    |  | 2147 |

## Human TNF- $\alpha$

| Oligo Type | Sequence                          | Oligo Number | Secondary Cassette | Comments                                      |      |
|------------|-----------------------------------|--------------|--------------------|---|------|
| probe      | cagtcacgcctctctctctcct-NH2        | 511-77-01    | TT-1/TT-2          | 3' amine (based on 685-27-01-1 base shorter)  | 2148 |
| arrestor   | caggcagtcagatgactgtctgg           | 511-77-02    |                    | All 2'-Ome + 3' amine arrestor for 511-77-01  | 2149 |
| probe      | cagtcacgcctctctctctcct-NH2        | 511-78-01    | TT-1/TT-2          | 3' amine (based on 685-27-01-2 bases shorter) | 2150 |
| arrestor   | aggcagtcagatgactgtctgg            | 511-78-02    |                    | All 2'-Ome + 3' amine arrestor for 511-78-01  | 2151 |
| invader    | ctt gtc act cgg ggt tca aga tga a | 685-28-01    |                    |   | 2152 |

## Human IL-1 $\beta$

| Oligo Type | Sequence                      | Oligo Number | Secondary Cassette | Comments                      |      |
|------------|-------------------------------|--------------|--------------------|-------------------------------|------|
| probe      | gcgcgcacgcctctctctctctcct-NH2 | 511-79-01    | MO4-1/MO4-2/MO4-3  | 3' amine (based on 685-21-01) | 2153 |



2154  
2155  
2156

All 2'-One + 3' amine arrestor for 511-79-01  
All 2'-One + 3' amine arrestor for 511-79-01

511-80-01  
511-80-02  
685-23-01

arrestor ggccataacagagagagcgt  
arrestor ggccataacagagagagcgtga  
invader caggctcggagagagcacta

## Human IL-6

| Oligo Type | Sequence                                  | Oligo Number | Secondary Cassette | Comments                                     |      |
|------------|---|--------------|--------------------|--|------|
| probe      | ggcgcagcctctctctcattgaatcc-NH2            | 511-81-01    | MO4-1/MO4-2/MO4-3  | 3' amine (based on 685-16-01)                | 2157 |
| arrestor   | aggattcaatgagagagagcgtga                  | 511-82-01    |                    | All 2'-One + 3' amine arrestor for 511-81-01 | 2158 |
| arrestor   | aggattcaatgagagagagcgt                    | 511-82-02    |                    | All 2'-One + 3' amine arrestor for 511-81-01 | 2159 |
| probe      | cgttcacgtctctctcattgaatcc-NH2             | 781-27-01    | MO4-1/MO4-2/MO4-3  | 3' amine (511-81-01 with new arm)            | 2160 |
| arrestor   | aggattcaatgagagagagcgt                    | 781-27-02    |                    | All 2'-One + 3' amine arrestor for 781-27-01 | 2161 |
| probe      | ggcgcagcctctctcattgaatcc-NH2              | 511-83-01    | MO4-1/MO4-2/MO4-3  | 3' amine (based on 685-16-01)                | 2162 |
| arrestor   | ggattcaatgagagagagcgtga                   | 511-84-01    |                    | All 2'-One + 3' amine arrestor for 511-81-01 | 2163 |
| arrestor   | ggattcaatgagagagagcgt                     | 511-84-02    |                    | All 2'-One + 3' amine arrestor for 511-81-01 | 2164 |
| probe      | cgttcacgtctctcattgaatcc-NH2               | 781-28-01    | MO4-1/MO4-2/MO4-3  | 3' amine (511-83-01 with new arm)            | 2165 |
| arrestor   | ggattcaatgagagagagcgt                     | 781-28-02    |                    | All 2'-One + 3' amine arrestor for 781-28-01 | 2166 |
| probe      | cgttcacgtctctcattgaatcc-NH2               | 781-29-01    | MO4-1/MO4-2/MO4-3  | 3' amine (1 base shorter than 781-28-01)     | 2167 |
| arrestor   | ggattcaatgagagagagcgt                     | 781-29-02    |                    | All 2'-One + 3' amine arrestor for 781-29-01 | 2168 |
| probe      | cgcgcagcactctctcattgaatcc-NH2             | 781-30-01    | TT-1/TT-2          | 3' amine (781-29-01 with new arm)            | 2169 |
| arrestor   | gattcaatgagagagagcgt                      | 781-30-02    |                    | All 2'-One + 3' amine arrestor for 781-30-01 | 2170 |
| invader    | cca aaa gtc cag tga tta tta cca ggc aag a | 685-18-01    |                    |  | 2171 |

## Secondary Cassettes

|            |   |           |        |  |      |
|------------|---|-----------|--------|--|------|
| SRT        | cggaggaagcagtggtggtcctctcattgaatcc-NH2      | 277-68-05 | FV-1   |  | 2172 |
| FRET probe | Fcaac(Cy3)gtctctccg                         | 187-46-01 |        |  | 2173 |
| SRT        | ccaggaagcaagtggtggtcctctcattgaatcc-NH2      | 787-29-01 | FV-2   |  | 2174 |
| FRET probe | Fcaac(Cy3)gtctctccg                         | 787-29-02 |        |  | 2175 |
| SRT        | cggaggaagcagtggtggtcctctcattgaatcc-NH2      | 641-60-03 | MO4-1  |  | 2176 |
| FRET probe | Fcaac(Cy3)gtctctccg                         | 187-46-01 |        |  | 2177 |
| SRT        | cggaggaagcagtggtggtcctctcattgaatcc-NH2      | 562-63-01 | MO4-2  |  | 2178 |
| FRET probe | Fcaac(Cy3)gtctctccg                         | 187-46-01 |        |  | 2179 |
| SRT        | ccaggaagcaagtggtggtcctctcattgaatcc-NH2      | 936-29-01 | MO4-3  |  | 2180 |
| FRET probe | Fcaac(Cy3)gtctctccg                         | 787-29-02 |        |  | 2181 |
| SRT        | cggaggaagcagtggtggtcctctcattgaatcc-NH2      | 562-92-01 | TT-1   |  | 2182 |
| FRET probe | Fcaac(Cy3)gtctctccg                         | 187-46-01 |        |  | 2183 |
| SRT        | cggaggaagcagtggtggtcctctcattgaatcc-NH2      | 685-56-01 | TT-2   |  | 2184 |
| FRET probe | Fcaac(Cy3)gtctctccg                         | 187-46-01 |        |  | 2185 |
| SRT        | gctctgagatgaagagagagcgtgaatcc-NH2           | 491-68-02 | MO2    |  | 2186 |
| FRET probe | Fcttc(Cy3)tcctcagtcgc                       | 491-68-01 |        |  | 2187 |
| SRT        | cgg agg aag cgg tgg cgt acg act ggt taa-NH2 | 458-35-03 | MISC-1 |  | 2188 |
| FRET probe | Fcaac(Cy3)gtctctccg                         | 187-46-01 |        |  | 2189 |
| SRT        | cgg agg aag cgg tgg cgg ggg gtt ggt-PO3     | 441-31-02 | MISC-2 |  | 2190 |
| FRET probe | Fcaac(Cy3)gtctctccg                         | 187-46-01 |        |  | 2191 |





Oligo sequence descriptions: 5' to 3' direction, 2-Ome nts are bolded and underlined, internal modifications defined in ( )

FRET Oligo/SRT Combinations

| Set    | FRET Oligo | SRT         |
|--------|------------|-------------|
| Set 1  | 187-46-01  | 641-60-02   |
| Set 2  | 187-46-01  | 690-82-03   |
| Set 3  | 307-70-02  | 339-50-03   |
| Set 4  | 303-18-05  | 343-63-07   |
| Set 5  | 303-18-05  | 343-25-01   |
| Set 6  | 187-46-01  | 649-10-01   |
| Set 7  | 744-80-03  | 277-068-05N |
| Set 8  | 187-46-01  | 833-18-07   |
| Set 9  | 767-28-03  | 777-71-10   |
| Set 10 | 767-29-02  | 996-29-01   |
| Set 11 | 1067-20-01 | 996-29-01   |
| Set 12 | 307-70-02  | 307-70-04   |
| Set 13 | 491-01-01  | 491-02-04   |
| Set 14 | 187-46-01  | 562-84-01   |

FRET Oligos

| Oligo #    | Oligo Sequence              |
|------------|-----------------------------|
| 187-46-01  | Fam-CAAC(CY3)GCTTCTCTCCG    |
| 307-70-02  | Fam-ATTC(CY3)TCTCAGAC-NH2   |
| 303-18-05  | Fam-TAAC(CY3)GCTTCTCTCCG    |
| 744-80-03  | Fam-CAAT(Dabey)TGTCTCTCTCCG |
| 767-28-03  | Red Dye-CTC(Z-21)TCTCAGTCCG |
| 767-29-02  | Fam-CAC(Z-21)TGTCTCTCTGG    |
| 1067-20-01 | Fam-CAC(Z-28)TGTCTCTCTGG    |
| 491-01-01  | Fam-CTTC(CY3)TCTCAGAC       |

| SEQ ID NO |
|-----------|
| 2192      |
| 2193      |
| 2194      |
| 2195      |
| 2196      |
| 2197      |
| 2198      |
| 2199      |

SRT

| Oligo #     | Oligo Sequence                    |
|-------------|-----------------------------------|
| 641-60-02   | CGGAGGAAGCAGTTGGAGGCGTGACGGT-NH2  |
| 690-82-03   | CGGAGGAAGCAGTTGGCGGTGACGGTT       |
| 339-50-03   | CAGTCTGAGATGAATGAGACGAGAGT-NH2    |
| 343-63-07   | CGGAGGAAGCGGTTAGTCTGTACGTCAT-NH2  |
| 343-25-01   | CGGAGGAAGCGGTTAGTCTGCCACGTCAT-NH2 |
| 649-10-01   | CGGAGGAAGCAGTTGTGCGCCTCGTAA-NH2   |
| 277-068-05N | CGGAGGAAGCAGTTGTGCGCCTCGTAA-NH2   |
| 833-18-07   | CGGAGGAAGCAGTTGTGCGGCGTGCGGT-NH2  |
| 777-71-10   | CCGAGTGAAGTGAAGGAGCGTGACGGU-NH2   |
| 996-29-01   | CCGAGTGAAGTGAAGGAGCGTGACGGU-NH2   |
| 307-70-04   | CAGTCTGAGATGAATGATACGCGG-NH2      |
| 491-02-04   | AGTCTGAGATGAAGGAGCGTGACGTTGG-NH2  |
| 562-84-01   | CGGAGGAAGCGGTTGGTGTCTCGGGG-NH2    |

| SEQ ID NO |
|-----------|
| 2200      |
| 2201      |
| 2202      |
| 2203      |
| 2204      |
| 2205      |
| 2206      |
| 2207      |
| 2208      |
| 2209      |
| 2210      |
| 2211      |
| 2212      |

| Oligo Type    | Oligo #    | Oligo Sequence                   | Notes           | Position          | SEQ ID NO |
|---------------|------------|----------------------------------|-----------------|-------------------|-----------|
| Human IL-2    | 196-56-01  | TCTGTGCGGTATCTCTTCTGGGCATGTAA    |                 | Splice Junction 2 | 2213      |
| Probe         | 196-56-02  | GTGGCGTATCTCTTCTGGGCATGTAA       |                 |                   | 2214      |
| Probe         | 196-56-03  | CGGTATCTCTTCTGGGCATGTAA          | ddC = dideoxy C |                   | 2215      |
| Invader       | 128-93-02  | GAAGATGTTTCACTCTGTGGG(dC)        |                 |                   | 2216      |
| Capture Oligo | 145-030-05 | AAAGATACGACACAGACAG(BIOTIN-3A)TT |                 |                   | 2217      |
| Probe         | 315-28-01  | TGGGTATCTTAATTCATTCAAAAT         |                 | Splice Junction 1 | 2218      |
| Invader       | 315-28-02  | TGGGAGTTTGGGATCTCTGTAAATTAA      |                 |                   | 2219      |



|               |            |                               |      |
|---------------|------------|-------------------------------|------|
| Capture Oligo | 195-023-01 | AAAAGATACGCCACAGC(BIOTIN-dTTC | 2220 |
| Probe         | 315-29-01  | TGGCGTATCTAAATTAAATTCATTC     | 2221 |
| Invader       | 315-29-02  | ATCTGGTGAGTTGGGATTCITGA       | 2222 |
| Capture Oligo | 195-023-01 | AAAAGATACGCCACAGC(BIOTIN-dTTC | 2223 |
| Probe         | 315-29-03  | TGGCGTATCTTCCATTCAAAATCATC    | 2224 |
| Invader       | 315-29-04  | GTTTGGGATCTTGTAATTATAAA       | 2225 |
| Capture Oligo | 195-023-01 | AAAAGATACGCCACAGC(BIOTIN-dTTC | 2226 |
| Probe         | 315-30-01  | GTGGCGTATCTCTTGGGCAT          | 2227 |
| Invader       | 315-30-02  | GAAGATGTTTCAGTCTGTGGC         | 2228 |
| Capture Oligo | 195-023-01 | AAAAGATACGCCACAGC(BIOTIN-dTTC | 2229 |

|                    |            |                               |      |
|--------------------|------------|-------------------------------|------|
| Human b-actin      | 315-26-01  | TGGCGTATCTCTGGGTCATCTTC       | 2230 |
| Probe              | 315-26-02  | GGGTGTTGAAGGTCCTCAACATGAA     | 2231 |
| Invader            | 195-023-01 | AAAAGATACGCCACAGC(BIOTIN-dTTC | 2232 |
| Capture Oligo      | 315-27-01  | TGGCGTATCTCTGATCTTCATTGT      | 2233 |
| Probe              | 315-27-02  | ACTTGGCTCAGGAGGAGCAATGAA      | 2234 |
| Invader            | 195-023-01 | AAAAGATACGCCACAGC(BIOTIN-dTTC | 2235 |
| Capture Oligo      | 315-91-01  | TGGCGTATCTGATCTGGGTCATCT      | 2236 |
| Probe              | 315-91-02  | TGGCTGGGGTGTGAAGGTCTCAACAA    | 2237 |
| Invader            | 195-023-01 | AAAAGATACGCCACAGC(BIOTIN-dTTC | 2238 |
| Capture Oligo      | 315-92-01  | ACCCGTATCTGCCAGGAGGGA         | 2239 |
| Probe              | 315-92-02  | AGTTTCGTGGATGCCACAGGAGACCAA   | 2240 |
| Invader            | 315-92-03  | AGTTTCGTGGATGCTACAGGAGACCAA   | 2241 |
| Capture Oligo      | 195-023-01 | AAAAGATACGCCACAGC(BIOTIN-dTTC | 2242 |
| Probe              | 340-32-01  | TGGCGTATCTCTCAACATGATCT       | 2243 |
| Invader            | 340-32-02  | ACGTACATGGCTGGGGTGTGAAGGA     | 2244 |
| Capture Oligo      | 195-023-01 | AAAAGATACGCCACAGC(BIOTIN-dTTC | 2245 |
| Probe              | 340-33-01  | TGGCGTATCTGATCTGGGTCATC       | 2246 |
| Invader            | 340-33-02  | TGGCTGGGGTGTGAAGGTCTCAACAA    | 2247 |
| Capture Oligo      | 195-023-01 | AAAAGATACGCCACAGC(BIOTIN-dTTC | 2248 |
| Probe              | 740-01-01  | CCGTACAGCCTCGCCTTGGGGTTC      | 2249 |
| Invader            | 740-01-02  | TCTGGGTCTCTTCTCGCGGTTGA       | 2250 |
| Arrestor           | 740-01-03  | GAACCCCAAGGCGAGGCGGT          | 2251 |
| Secondary Cassette | 740-01-08  | CCGTACAGCCTCGGTCATCTCTCT      | 2252 |
| Probe              | 740-01-04  | CGCGGTTGGCCTTGGGGTT           | 2253 |
| Stacker            | 740-01-06  | CTGGGGTGTGAAGGTCTCAACATGATCC  | 2254 |
| Invader            | 740-01-09  | AGAGATGACCCCATGGGGG           | 2255 |

Set 1

Set 2

|                    |           |                            |      |
|--------------------|-----------|----------------------------|------|
| Mouse GAPDH        | 425-59-01 | Fl-CTCTCTGTCCTCTCTGGAAGA   | 2256 |
| Probe              | 425-59-02 | ATTGTGATGTAGTGGGGTCTCGCA   | 2257 |
| Invader            | 425-60-01 | Fl-CTCTCTGTCCTCTCTGACAATC  | 2258 |
| Probe              | 425-60-02 | GCAGTTGGTGGTGCAGATGCATA    | 2259 |
| Invader            | 425-61-01 | Fl-CTCTCTGTCCTCTACAGGAAATG | 2260 |
| Probe              | 425-61-02 | GCTGTAGCCGTATTCATTGTCAA    | 2261 |
| Invader            | 425-80-01 | Fl-CTCTCTGTCCTCTCTCTGGAAG  | 2262 |
| Probe              | 425-80-02 | CATTGATGTAGTGGGGTCTCGA     | 2263 |
| Invader            | 425-87-01 | CTCTCTGTCCTCTCTCTGGAAGA    | 2264 |
| Probe              | 425-87-02 | ATTGTGATGTAGTGGGGTCTCGCA   | 2265 |
| Arrestor           | 425-87-04 | ICITCCAGGAGAGACG           | 2266 |
| Secondary Cassette | 425-80-02 | CTCTCTGTCCTCTCTCTGGAAG     | 2267 |
| Probe              | 425-80-02 | CATTGTGATGTAGTGGGGTCTCGA   | 2268 |

Fl = Fluorescein

Fl = Fluorescein

Fl = Fluorescein

Same as 425-59-01 without Fluorescein

Same as 425-80-01 without Fluorescein



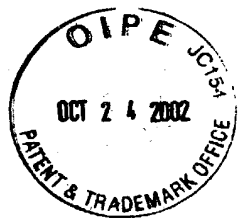
|                                 |           |                                     |  |                   |      |
|---------------------------------|-----------|-------------------------------------|--|-------------------|------|
| Arrestor                        | 425-87-05 | <b>CTTCCAGGAGGAGCG</b>              |  |                   | 2269 |
| Secondary Cassette              |           | Set 3                               |  | Splice Junction 8 | 2270 |
| Probe                           | 425-87-03 | CTCTCTGCTCTCTACCGAAATG              |  |                   | 2271 |
| Invader                         | 425-81-02 | CGTGTAGCGGTATCTATTGTCAA             |  |                   | 2272 |
| Arrestor                        | 425-87-06 | <b>CATTCTGGTAGAGCG</b>              |  |                   |      |
| Secondary Cassette              |           | Set 3                               |  | Splice Junction 4 | 2273 |
| Probe                           | 453-23-01 | ATGACGTGACAGACCTCTCTGGAAGAT         |  |                   | 2274 |
| Probe                           | 453-23-03 | ATGACGTGACAGACCTCTCTGGAAGATG        |  |                   | 2275 |
| Invader                         | 425-80-02 | CATTGTGTTAGTGGGGTCTCGA              |  |                   | 2276 |
| Arrestor                        | 453-23-04 | <b>CATCTCCAGGAGGCTCTGT-NH2</b>      |  |                   |      |
| Secondary Cassette              |           | Set 4                               |  | Splice Junction 4 | 2277 |
| Probe                           | 453-23-02 | ATGACGTGGCAGACCTCTCTGGAAGAT         |  |                   | 2278 |
| Invader                         | 425-80-02 | CATTGTGTTAGTGGGGTCTCGA              |  |                   | 2279 |
| Arrestor                        | 453-23-05 | <b>ATCTCCAGGAGGCTCTG-NH2</b>        |  |                   |      |
| Secondary Cassette              |           | Set 5                               |  |                   |      |
| Probe                           | 435-87-04 | CAGTCAGCTCTCTCAGGTTTTG              |  |                   | 2280 |
| Invader                         | 395-05-07 | AGGCAGCTCTCAGGTCAAGGTGTGA           |  |                   | 2281 |
| FRET Probe - Secondary Reaction | 524-51-01 | Fl-CTTC(C/3)TCTCAGTAGCG             |  |                   | 2282 |
| Secondary Reaction Template     | 524-51-03 | CGCTACTGAGATGAAGGAGACGTGACTGT-NH2   |  |                   | 2283 |
| Secondary Reaction Template     | 524-51-04 | CGCTAATGAGATGAAGGAGACGTGACTGT-NH2   |  |                   | 2284 |
| Probe                           | 435-87-04 | CAGTCAGCTCTCTCAGGTTTTG              |  |                   | 2285 |
| Invader                         | 395-05-07 | AGGCAGCTCTCAGGTCAAGGTGTGA           |  |                   | 2286 |
| FRET Probe - Secondary Reaction | 524-51-02 | Fl-CTTC(C/3)TCTCAGTAGCGA            |  |                   | 2287 |
| Secondary Reaction Template     | 524-51-05 | TGCTACTGAGATGAAGGAGACGTGACTGT-NH2   |  |                   | 2288 |
| Secondary Reaction Template     | 524-51-06 | TGCTAATGAGATGAAGGAGACGTGACTGT-NH2   |  |                   | 2289 |
| Human Ubiquitin                 |           |                                     |  |                   |      |
| Probe                           | 796-72-01 | AACGAGGGCGCACCTTTACATTTTCTATCGTATCC |  | 119               | 2290 |
| Invader                         | 428-81-02 | CGTCTTATCTCTGGATCTTGCGA             |  |                   | 2291 |
| Arrestor                        | 796-72-02 | <b>GGATACGATAGAAAATGTAAAGGTGCGC</b> |  |                   | 2292 |
| Secondary Cassette              |           | Set 6                               |  |                   |      |
| Probe                           | 796-72-03 | AACGAGGGCGCACCTTTACATTTTCTATCGTATC  |  |                   | 2293 |
| Invader                         | 428-81-02 | CGTCTTATCTCTGGATCTTGCGA             |  |                   | 2294 |
| Arrestor                        | 796-72-04 | <b>GATACGATAGAAAATGTAAAGGTGCGC</b>  |  |                   | 2295 |
| Secondary Cassette              |           | Set 6                               |  |                   |      |
| Probe                           | 820-35-01 | AACGAGGGCGCACCTTTACATTTTCTATCG      |  |                   | 2296 |
| Probe                           | 820-35-02 | AACGAGGGCGCACCTTTACATTTTCTATCGT     |  |                   | 2297 |
| Invader                         | 428-81-02 | CGTCTTATCTCTGGATCTTGCGA             |  |                   | 2298 |
| Arrestor                        | 820-35-03 | <b>ACGATAGAAAATGTAAAGGTGCGC</b>     |  |                   | 2299 |
| Secondary Cassette              |           | Set 7                               |  |                   |      |
| Probe                           | 820-88-01 | AACGAGGGCGCACCTTTACATTTTCTATCGT-NH2 |  |                   | 2300 |
| Probe                           | 820-88-02 | AACGAGGGCGCACCTTTACATTTTCTATCGTU    |  |                   | 2301 |
| Probe                           | 820-88-03 | AACGAGGGCGCACCTTTACATTTTCTATCGTG    |  |                   | 2302 |
| Probe                           | 820-88-04 | AACGAGGGCGCACCTTTACATTTTCTATCGTT    |  |                   | 2303 |
| Invader                         | 428-81-02 | CGTCTTATCTCTGGATCTTGCGA             |  |                   | 2304 |
| Arrestor                        | 820-35-03 | <b>ACGATAGAAAATGTAAAGGTGCGC</b>     |  |                   | 2305 |
| Secondary Cassette              |           | Set 7                               |  |                   |      |
| Probe                           | 847-65-01 | GCCGCGACGGCGCTTTACATTTTCTATCGT      |  |                   | 2306 |
| Invader                         | 428-81-02 | CGTCTTATCTCTGGATCTTGCGA             |  |                   | 2307 |
| Arrestor                        | 847-65-02 | <b>ACGATAGAAAATGTAAAGGTGCGC</b>     |  |                   | 2308 |
| Arrestor                        | 847-65-03 | <b>ACGATAGAAAATGTAAAGGTGCGC</b>     |  |                   | 2309 |
| Secondary Cassette              |           | Set 8                               |  |                   |      |
| Probe                           | 936-61-01 | AACGAGGGCGCACCTTTACATTTTCTATCGTCCG  |  |                   | 2310 |
| Invader                         | 428-81-02 | CGTCTTATCTCTGGATCTTGCGA             |  |                   | 2311 |

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|  |            |  |   |      |
|--|------------|--|---|------|
| Arrestor<br>Secondary Cassette         | 938-61-02  | <b>CGGATACGATAGAAATGTAAAGGTGGCG</b><br>Set 7 | Same as 428-87-03 without Biotin blocking group | 2312 |
| Monocyte Chemotactic Protein 1 (MCP-1) | 820-89-01  | CCGTCACGCTCCTTCGGAGTTGGG                     | Same as 720-92-01 without the amine             | 2313 |
| Invader                                | 685-76-01  | GGGTTGTGGAGTGAGTGTCAAGTA                     |   | 2314 |
| Arrestor                               | 820-89-02  | CCCAAACTCCGAAGGAGGCG                         |   | 2315 |
| Secondary Cassette                     |            | Set 9  |   |      |
| MAGE-3                                 | 1001-01-01 | FLTTTCTGGAAGCTTTGCT                          | Same analyte specific Region as 871-18-02       | 2316 |
| Probe                                  | 871-18-03  | <b>CGATGCGCAAGACGAGCTGCAAGGAAG</b>           |   | 2317 |
| Invader                                | 871-18-01  | <b>GAAGATCACAGGAAGAATAAC</b>                 |   | 2318 |
| Stacker                                | 1138-50-01 | <b>GCAGCTTCITGGGA</b>                        |   | 2319 |
| Stacker                                | 1138-50-02 | AACGAGGCGCACGTTGGGTGA                        |   | 2320 |
| Probe                                  | 1138-50-03 | <b>GCAGCTTCITGGGACT</b>                      |   | 2321 |
| Stacker                                | 1138-50-04 | AACGAGGCGCACGTTGGGTGAG                       |   | 2322 |
| Probe                                  | 1138-50-05 | CTCCAGGTAGTTTCTCTGCACGAATC                   |   | 2323 |
| Invader                                | 1138-50-06 | <b>CTCACCCCAACGTCGCG</b>                     |   | 2324 |
| Arrestor                               |            | Set 10                                       |   |      |
| Secondary Cassette                     | 1138-51-01 | <b>AGCTTCITGGGATC</b>                        |   | 2325 |
| Stacker                                | 1138-51-02 | AACGAGGCGCACGTTGGGTGAGC                      |   | 2326 |
| Probe                                  | 1138-51-03 | <b>GCCTCTGGGATCC</b>                         |   | 2327 |
| Stacker                                | 1138-51-04 | AACGAGGCGCACGTTGGGTGAGCA                     |   | 2328 |
| Probe                                  | 1138-51-05 | CAGGTAGTTTCTCTGCACGAAATGA                    |   | 2329 |
| Invader                                | 1138-51-06 | <b>TGCTCACCCCAAGTCGCG</b>                    |   | 2330 |
| Arrestor                               |            | Set 11                                       |   |      |
| Secondary Cassette                     | 1138-67-01 | <b>TGCGAGGATCAGTGC</b>                       |   | 2331 |
| Stacker                                | 1138-67-02 | AACGAGGCGCACCCCAATTCATAACA                   |   | 2332 |
| Probe                                  | 1138-67-03 | GGCCCTTGAGACCCCA                             |   | 2333 |
| Invader                                | 1138-67-04 | <b>TGTTATGAAATGGTGGTGCGC</b>                 |   | 2334 |
| Arrestor                               |            | Set 11                                       |   |      |
| Secondary Cassette                     | 1138-67-05 | <b>CAIGCAGGATCAGTGC</b>                      |   | 2335 |
| Stacker                                | 1138-67-06 | AACGAGGCGCACACCAATTCATAA                     |   | 2336 |
| Probe                                  | 1138-67-07 | AGGGCCCTTGAGCCCA                             |   | 2337 |
| Invader                                | 1138-67-08 | <b>TTATGAAATGGTGGTGCGC</b>                   |   | 2338 |
| Arrestor                               |            | Set 11                                       |   |      |
| Secondary Cassette                     |            |  |   |      |
| Human Oncostatin M                     | 335-30-02  | CCTGGCGTATCTAGGGCTCCA                        | Same as 435-67-04 with 3' Amine                 | 2339 |
| Probe                                  | 264-42-03  | GTGTTACAGGTTTGGAGGCGGATAA                    |   | 2340 |
| Invader                                | 374-32-01  | <b>CTGGAGCCCTAGATAC-NH2</b>                  |   | 2341 |
| Arrestor                               | 374-32-02  | <b>CTGGAGCCCTAGATACG-NH2</b>                 |   | 2342 |
| Arrestor                               | 374-32-03  | <b>CTGGAGCCCTAGATACG-NH2</b>                 |   | 2343 |
| Secondary Cassette                     |            | Set 12                                       |   |      |
| Probe                                  | 524-39-01  | CAGTCAAGCTCTCTCAGGTTTGTG-NH2                 |   | 2344 |
| Invader                                | 395-05-07  | AGGCAGCTCTCAGGTCAGGTGTGA                     |   | 2345 |
| Stacker                                | 435-40-02  | GAGGCGGATAGGGCTCCA                           |   | 2346 |
| Arrestor                               | 369-47-07  | <b>CAAAACCTGGAAGAGACG-NH2</b>                |   | 2347 |
| Arrestor                               |            | Set 13                                       |   |      |
| Secondary Cassette                     | 1088-74-01 | AACGAGGCGCACCCCTCTGTGTG                      |   | 2348 |
| Probe                                  | 1088-74-02 | <b>CACACAGAGGGTGGCG</b>                      |   | 2349 |
| Arrestor                               | 1088-74-03 | AACGAGGCGCACCCCTCTGTGTG-NH2                  |   | 2350 |
| Probe                                  | 1088-74-04 | AACGAGGCGCACCCCTCTGTGTG-HEX                  |   | 2351 |
| Invader                                | 603-75-03  | GCAAGGACACAGACTGAGAGCGTA                     |   | 2352 |

HEX = Hexanediol



|                    |            |                                 |      |
|--------------------|------------|---------------------------------|------|
| Stacker            | 752-01-05  | AGCAGTACCCCAIG                  | 2353 |
| Arrestor           | 541-52-04  | CACACAGAGGAGCGC-NH2             | 2354 |
| Secondary Cassette |            | Set 10                          |      |
| Probe              | 1138-49-02 | AACGAGGCGCACCTTCTGGAG-NH2       | 2355 |
| Stacker            | 1138-49-01 | CTGGGCAAGGAG                    | 2356 |
| Invader            | 1138-49-03 | GTCTGTGCATGAGATCTGTCTGA         | 2357 |
| Arrestor           | 1138-49-04 | CTCCAGAGGTCGCG                  | 2358 |
| Secondary Cassette |            | Set 11                          |      |
| Probe              | 1138-49-06 | AACGAGGCGCACTCTGCTTCT-NH2       | 2359 |
| Stacker            | 1138-49-05 | GGAGCTGGCCAA                    | 2360 |
| Invader            | 1138-49-07 | TGGTGTCTGCATGAGATCTGA           | 2361 |
| Arrestor           | 1138-49-08 | ICCGAAGCAGAGTCGCG               | 2362 |
| Secondary Cassette |            | Set 11                          |      |
| Probe              | 1138-49-10 | AACGAGGCGCACCATGAGATCT-NH2      | 2363 |
| Stacker            | 1138-49-09 | GTCTGTCTGGA                     | 2364 |
| Invader            | 1138-49-11 | GAGTGTCTGTGTGTCCTGA             | 2365 |
| Arrestor           | 1138-49-12 | AGATCTCATGTGTGCGC               | 2366 |
| Secondary Cassette |            | Set 11                          |      |
| Stacker            | 1163-01-01 | IGGCCAAGGAGCA                   | 2367 |
| Probe              | 1163-01-02 | AACGAGGCGCACCTTCTGGAGC-NH2      | 2368 |
| Invader            | 1163-01-03 | TCTGTGCATGAGATCTGTCTGCA         | 2369 |
| Arrestor           | 1163-01-04 | GCTCCAGAAATGCGC                 | 2370 |
| Secondary Cassette |            | Set 11                          |      |
| Stacker            | 1163-01-05 | GGCCAAGGAGCAC                   | 2371 |
| Probe              | 1163-01-06 | AACGAGGCGCACCTTCTGGAGCT-NH2     | 2372 |
| Invader            | 1163-01-07 | CCTGCATGAGATCTGTCTGCTA          | 2373 |
| Arrestor           | 1163-01-08 | AGCTCCAGAGTCGCG                 | 2374 |
| Secondary Cassette |            | Set 11                          |      |
| Stacker            | 1163-01-09 | GCCAAGGAGCACG                   | 2375 |
| Probe              | 1163-01-10 | AACGAGGCGCACCTTGGAGCTC-NH2      | 2376 |
| Invader            | 1163-01-11 | CCTGCATGAGATCTGTCTGCTTA         | 2377 |
| Arrestor           | 1163-01-12 | GAGCTCCAGTCGCGC                 | 2378 |
| Secondary Cassette |            | Set 11                          |      |
| 84h6r              |            |                                 |      |
| Probe              | 688-51-01  | CGCCGAGATCAGCCCAAGCGGTCT        | 2379 |
| Invader            | 688-51-02  | AGCCCTTGAGTTTAATAACTTCATAGCACTA | 2380 |
| Arrestor           | 688-51-03  | AGACGCTGTTGGCGTGAIC             | 2381 |
| Secondary Cassette |            | Set 14                          |      |
| Probe              | 688-51-04  | CGCCGAGATCACCTCAACACATAAAAGCCA  | 2382 |
| Invader            | 688-51-05  | CGGAGACTGAGGAATACGTCAACCA       | 2383 |
| Arrestor           | 688-51-06  | TGGCTTTATGGTGTGAGTGAIC          | 2384 |
| Secondary Cassette |            | Set 14                          |      |
| MSH2               |            |                                 |      |
| Probe              | 690-32-02  | CGTCAAGCTCCGAACTGCCCTAG         | 2385 |
| Invader            | 690-32-04  | GTATAATAGTCCCGAGCATCAAGAGGC     | 2386 |
| Stacker            | 709-52-01  | GGTCTTGGYAGGG                   | 2387 |
| Arrestor           | 690-32-05  | GCGGAGGCTTGACGGGAIC             | 2388 |
| Secondary Cassette |            | Set 1                           |      |

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SEQ ID NO

bold indicates 2' O methyl base

ELISA Format Kits

Leukocyte-associated molecule-1 alpha subunit, human (h-LFA1)

G4731 Probe Set

p  
l  
c

5'-CTCTCTCTCTCTCCAGGGCGTCGTCGG-PO4-3'  
5'-CTGTCTCACACACGTCGGTCTGA-3'  
5'-AAAAAGGAGACGAGAGAGTG-3'

2389  
2390  
2391

for the remainder of the oligo sets on this list, the *fret*/target secondary sets are one of the following 11:

FRET/TARGET SETS

FRET TARGET

set 1 307-70-03 502-93-01  
set 2 307-70-03 502-93-02  
set 3 187-46-01 641-60-02  
set 4 187-46-01 277-68-05  
set 5 187-46-01 685-56-01  
set 6 187-46-01 641-60-03  
set 7 187-46-01 649-10-01  
set 8 680-17-02 782-70-02  
set 9 187-46-01 277-68-06  
set 10 187-46-01 491-02-02  
set 11 307-70-03 761-40-02

FRETS

307-70-03  
187-46-01  
680-17-02

5'-Fam-ATTC(CY3)TCTCAGACT-NH2-3'  
5'-Fam-CAAC (CY3)GCTTCCTCCG-3'  
5'-Fam-CGCT (CY3)TCTCGCTCGC-3'

2392  
2393  
2394

TARGETS

502-93-01  
502-93-02  
641-60-02  
277-68-05  
685-56-01  
641-60-03  
649-10-01  
782-70-02  
277-68-06  
491-02-02

5'-CAGTCTGAGATGAATGATACGAGAGT-NH2-3'  
5'-CAGTCTGAGATGAATGAGACGAGAGT-NH2-3'  
5'-CGGAGGAAGCAGTTGGAGGCGTGACGGT-NH2-3'  
5'-CGGAGGAAGCAGTTGGTGGCCTCGTTAA-PO4-3'  
5'-CGGAGGAAGCAGTTGGTGGTGGCCTCGGCGG-NH2-3'  
5'-CGGAGGAAGCAGTTGGTGGCCTCGTTAA-NH2-3'  
5'-GCGAGAGAGACAGCGCAACCTGCCGTC-3'  
5'-CGGAGGAAGCAGTTGTCGCGAAGATG-3'  
5'-CGGAGGAAGCAGTTGGAGACGTGACTGTGG-NH2-3'

2395  
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2404



761-40-02

**Cell Lysate Kits**

adipocyte lipid binding protein, mouse (m-aP2)

C289 Probe Set

i

p

a

a

a

p

p

a

a

a

p

p

a

a

G392 Probe Set

p

i

rev-ErbA, mouse (m-revErbA)

C155 Probe Set

p

i

Carnitine palmitoyltransferase, mouse (m-CPT-1)

T352 Probe Set

p

i

C851 Probe Set

p

i

Carnitine palmitoyltransferase, human (h-CPT-1)

5'-GGAGTGAGACAGCGAAAGACTGCCGTTCT-3'

FRET/TARGET SET 1

5'-CCGCCATCTAGGGTTATGATGCTA-3'

5'-CTCTCTCGTCTCCTTCACTTCTCTGTCG-NH2-3'

3'-PO4-AGCAGAGGAAGTGGAAAGGACAGC-5'

3'-NH2-AGCAGAGGAAGTGGAAAGGACAGC-5'

3'-PO4-AGAGCAGAGGAAGTGGAAAGGACAGC-5'

5'-AACGAGGGCGACCTTCACTTCTCTGTCG-NH2-3'

5'-AACGAGGGCGACCTTCACTTCTCTGTCG-Biotin-3'

3'-PO4-CCGCGTGGAAAGTGGAAAGGACAGC-5'

3'-PO4-CTCCGCGTGGAAAGTGGAAAGGACAGC-5'

5'-CATCTTCGGGGACCTTCACTTCTCTGTCG-NH2

3'-PO4-GCCTGAAGTGGAAAGGACAGC-5'

3'-PO4-GCGCCTGAAGTGGAAAGGACAGC-5'

5'-CTTGCTCCCGTGTCTTCACTTCTCTGTCG-NH2

5'-CTTGCTCCCGTGTCTTCACTTCTCTGTCG-Biotin

3'-PO4-GGGCACGAAAGTGGAAAGGACAGC-5'

3'-PO4-AGGGGCACGAAAGTGGAAAGGACAGC-5'

FRET/TARGET SET 1

5'-CTCTCTCGTCTCCTTCACTTCTCTGTCG-NH2-3'

5'-TTGTGTAAGTCACGCCCTTTCATAAT-3'

FRET/TARGET SET 4

5'-AACGAGGGCGACGAAAGGAGGTAATGAATCT-NH2-3'

5'-CCACTCCTGAAGGCTCCGCAGTC-3'

FRET/TARGET SET 2

5'-CTCTCTCGTCTCAATGCCCTGTGCGCC-NH2-3'

5'-GCTTCAGGGTTTGTGGGAAGAAGAAC-3'

FRET/TARGET SET 2

5'-CTCTCTCGTCTCGTTTGGGGCGATACAT-NH2-3'

5'-CGGCTTGATCTCTTCAACGGTCCAC-3'

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U744 Probe set

p 5'-CTCTCTCGTCTCAACTTCAAATACCACTGTAATCT-NH2-3' 2430  
i 5'-CTCACGTAATTTGTAGCCACCAGGAGTTTC-3' 2431  
a 3'-NH2-GCAGAGTTGAAGTTTATGGTGACATTAGA-5' 2432  
s 5'-TGGTCCAAAGACCGACAGCAAAATCTTGAG-3' 2433

A456 Probe Set

p 5'-CAGTCACGTCTCTTCAGGGAGTAGCGCA-NH2-3' 2434  
i 5'-CCCGTGGTAGGAGAGCAGCACTA-3' 2435  
a 3'-NH2-GCAGAGAAGTCCTCATCGCGT-5' 2436

C759 Probe Set

p 5'-CTCTCTCGTCTCGCCACCAGGATT-NH2 2437  
i 5'-CTCCCAACAGTCGCTCACGTAATTTGTAA-3' 2438  
a 5'-AATCCTGGTGGCGGAGACG-B-3' 2439  
s 5'-TTAACTTCAAATACCACTGTAACTCTTGGTCCAAGACCG-3' 2440

G329 Probe Set

p 5'-ACCGAGGGCGACCAATTATTCCTAACG-b-3' 2441  
i 5'-GCCGTTTCAGAGTCGATGATTTTGA-3' 2442  
a 3'-(biotin)-GCGGTGGTTAATAAGGATTGC-5' 2443

C1763 Probe Set

p 5'-CATCTTCGGGAGACATTTCTTGATGATTCCTT-3' 2444  
i 5'-AAAGGTGTCTGGGCTCGTGT-3' 2445  
a 3'-(biotin)-GCCCTCTGTAAAGAACTACTAAGGAA-5' 2446

Phosphatidylinositol-3-phosphate p110  $\alpha$ , human (h-PI3Kp110 $\alpha$ )  
G1045 Probe Set (FV Arm)

p 5'-AACGAGGGCGACCAGTTTCCTCTGTG-NH2-3' 2447  
i 5'-GACCAAGCCCTGACATGAACTTTAC-3' 2448  
a 3'-NH2-CGCGTGGTCAAAAGGAGACAC-5' 2449

C1521 Probe Set

p 5'-CTCTCTCGTCTCGGAGGGTAATAAAGG-NH2-3' 2450  
i 5'-GCTGCCCTTTCATAATCTTATCGAAC-3' 2451  
a 3'-NH2-AGCAGAGCCCTCCCATTTATTCC-5' 2452

C2667 Probe Set

p 5'-CTCTCTCGTCTCGTTGTATTCTTTAAGCCAG-NH2-3' 2453  
i 5'-CGGTCCAGGTCATCCCAGAC-3' 2454

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2455

3'NH2-AGCAGAGCAACATAAGAAATTCGGTC-5'

G537 Probe Set

a

FRET/TARGET SET 2  
5'-CTCTCTCGTCTCCTCTCGTGGTGGATATGTTTG-NH2-3'  
5'-CTAAGTTTTTCAGGGATGGATGGTTTCATGC-3'  
3'NH2-AGCAGAGGAGACCCACCTATACAAAC-5'

2456  
2457  
2458

T3192 Probe Set

p

FRET/TARGET SET 2  
5'-CTCTCTCGTCTCAACTGTGTGGGC-NH2-3'  
5'-TTAAGATCTGTAGTCTTTCCGAAC-3'  
3'NH2-AGCAGAGTTACACACCCCG-5'

2459  
2460  
2461

Cartilage-derived morphogenic protein 1, human (h-CDMP1)

A831 Probe Set

p

FRET/TARGET SET 6  
5'-CCGTACGGCTCCTCTGTTGCCTCCC-(biotin)-3'  
5'-AGCCTCCAACTTCACGCTGT-3'  
5'-GGGAGGCAACAGGAGGCG-(biotin)-3'

2462  
2463  
2464

A1691 Probe Set

p

FRET/TARGET SET 5  
5'-CCGCCGAGATCACTAAGAGGATGCTGATGG-(biotin)-3'  
5'-ACACCACGTTGTTGGCAGAGTCAAG-3'  
5'-CCATCAGCATCCTCTTTCAGTGATCTCGG-(biotin)-3'

2465  
2466  
2467

b-actin, rat (r-bACT)

C1671 Probe Set (longer)

p

FRET/TARGET SET 6  
5'-CCGTACGGCTCGCCTTAGGGTTCA-NH2-3'  
5'-TCTGGTTCATCTTTTACGGTTGA-3'  
3'-GCGGAGCGGAATCCCAAGT-5'  
5'-GAGGGGCTCGGTGAGC-3'

2468  
2469  
2470  
2471

Bile Salt port Pump, rat (r-BSEP)

p

FRET/TARGET SET 5  
5'-CCGCCGAGATCACGAGTTCTTGCCCTTC-(biotin)-3'  
5'-CCGCCGAGATCACGAGTTCTTGCCCTTC-NH3-3'  
5'-TTACACACGCTTTTCCCTGGTATCTCC-3'  
3'-(biotin)-CTAGTGCTCAAGAACGGAAAG-5'

2472  
2473  
2474  
2475

G1288 Probe Set

p

FRET/TARGET SET 2  
5'-CTCTCTCGTCTCCAGAGGCCAGT-(biotin)-3'  
5'-TTCTTCATCTAGGACAAGTGTGGAACCAATAA-3'  
5'-ACTGGCCTTCTGGGAGACG-(biotin)-3'

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A790 Probe Set

p 5'-CCGTCACGCCCTCTTTCTCCTCTTCTCCT-(biotin)-3'  
i 5'-CCCCAATTTCCATTCTCATTTATCTCCGGAAGTAAATC-3'  
a 5'-AGGAGAAATGAGGAAAGAGGGCG-(biotin)-3'

2479  
2480  
2481

Nitric Oxide Synthase 2A, human (h-iNOS2)

A3418 Probe Set

p 5'-CCGTCACGCCCTCTGTCTTTCTTCGCG-(biotin)-3'  
i 5'-GCTGCACCCGCCACCC-3'  
a 5'-GCCGAAAGAAAGACAGAGGGCG-(biotin)-3'

2482  
2483  
2484

Neutral Carboxy Ester Hydrolase, human (h-NCEH)

A1221 Probe Set

p 5'-AACGAGGGCGCACTCTTCTTATTTCTCCTG-B-3'  
p 5'-AACGAGGGCGCACTCTTCTTATTTCTCCTG-NH2-3'  
i 5'-GTCTCAAAGTCCACCACAGTCTC-3'  
s 5'-CAGGAGAAATAGAGAGGTGCGC-(biotin)-3'

2485  
2486  
2487  
2488

A1221 Probe Set

p 5'-CCGTCACGCCCTCTTCTTATTTCTCCTC-3'  
p 5'-CCGTCACGCCCTCTTCTTATTTCTCCTC-NH2-3'  
i 5'-GTCTCAAAGTCCACCACAGTCTC-3'  
a 3'-GCGGAGAGAGAATAAGAGG-5'  
s 5'-TGGGATGGGTCTCTGGGC-3'

2489  
2490  
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2492  
2493

C1309 Probe Set

p 5'-GAACGGCGAGTTTGGCACTCTTGGCATT-NH2-3'  
i 5'-CAGGTAGGCGTAGGTCTTGA-3'  
a 3'-NH2-CGTCCAAACCGTGAGAACCGTAA-5'  
s 5'-GGCTCTGTGCTGGGCTA-NH2-3'

2494  
2495  
2496  
2497

Peroxisomal Proliferation Activator Protein Receptor alpha, human (h-PPAR<sub>α</sub>)

G1480 Probe Set

p 5'-CCGTCACGCCCTCCCGACTCCCGTCT-(biotin)-3'  
i 5'-CGGGTGCAGCGCAGCATT-3'  
a 5'-AGACGGAGTCGGGAGGGCG-(biotin)-3'

2498  
2499  
2500

A1044 Probe Set

p 5'-CCGTCACGCCCTCTGTCACTTGATCGTTCT-(biotin)-3'  
i 5'-TGGCCTCATAACTCCGTAATTTAGCAAG-3'  
a 5'-AGAACGATCAAGTGACAGAGGGCG-(biotin)-3'

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5'-TGCCCATTAGTCCAACAAGGAATCTGTA-3'  
3'-GCGGAGAAATACGGAACACT-5'  
5'-GAGATCTGACCATGCCATGCCATAAAGAGCC-NH2-3'

FRET/TARGET SET 7

2529  
2530  
2531  
2532

5'-AACGAGGCGCACGCTGGCAAACTTGT-NH2-3'  
5'-CCTTTCTGCTCTTTGGAGACTTGCATCA-3'  
3'-NH2-CGCGTGCAGCCGTTGAACA-5'  
5'-ACAACTCCATCAACACTGTGCTTTGCTG-NH2-3'

Hepatic Lipase, human (h-LIPC)

A830 Probe Set

2533  
2534  
2535  
2536

FRET/TARGET SET 7  
5'-AACGAGGCGCACCTCTAGGAAGTGGCA-NH2-3'  
5'-GTGCTGGGCAATATGCTCTGAGAGCG-3'  
3'-NH2-CGCGTGAGATCCTTCACCGT-5'  
5'-GCCAGGCTGGAAGGAGC-NH2-3'

C1154 Probe Set

2537  
2538  
2539

FRET/TARGET SET 5  
5'-CCGCCGAGATCACCGTCTCAGTTTGGT-NH2-3'  
5'-CGAGTAGTGACATGGTAAAGTTGTTGTTGGCT-3'  
3'-NH2-CTCTAGTGGCAGAGTCAAACCA-5'

Hepatic Lipase, rat (r-LIPC)

G357 Probe Set

2540  
2541  
2542  
2543

FRET/TARGET SET 5  
5'-CCGCCGAGATCACCGTCTCAGTTTGGT-NH2-3'  
5'-GGGAGATCCAGTCCCACTAATCCA-3'  
3'-NH2-TCTAGTGGTGCAAGTGCCCAA-5'  
5'-GGGACTGTGCGGACTTCAGG-NH2-3'

C1167 Probe Set

2544  
2545  
2546  
2547

FRET/TARGET SET 8  
5'-GAACGGCAGGTTTGGGAAATTTCTTTATTCTT-NH2-3'  
5'-ATTCTTCGCCCCAGGGTGATG-3'  
3'-NH2-GTCCAAACCCCTTAAAGAAATAAAGAA-5'  
5'-CTTTTGTCCCCAGCAGTGT-NH2-3'

Metabotropic Glutamate Receptor 2, rat (r-mGluR2)

C1403 Probe Set

2548  
2549  
2550  
2551

FRET/TARGET SET 7  
5'-AACGAGGCGCACGCTGGTGTGGGA-NH2-3'  
5'-GCCTCATAGCATCGCAGAGGTGT-3'  
3'-NH2-CGCGTGCCACCAACCCCT-5'  
5'-CAGAGGGCACGGTGCATGTTGT-NH2-3'



G-protein coupled receptor 2, rat (r-ETBR-LP2)

A1629 Probe set

P  
I  
a  
s

FRET/TARGET SET 8  
5'-GAACGGCAGGTTTGTACGACAGCCGC-NH2-3'  
5'-GAGAGGCCAAAGTGAGACCATGTGAAAGAAA-3'  
3'-NH2-CGTCCAAACAGTCGTCTGGCG-5'  
5'-CATGGATCGGCATGGCCCC-NH2-3'

2552  
2553  
2554  
2555

kappa b alpha, human (h-MAD3)

C542 Probe Set

P  
I  
a

FRET/TARGET SET 7  
5'-AACGAGCGCACGGGTAGGGGGG-(biotin)-3'  
5'-GCCCTGCTCACAGGCAAT-3'  
5'-CCCCCTACACCGTGCGC-(biotin)-3'

2556  
2557  
2558

C363 Probe Set

P  
I  
A

FRET/TARGET SET 6  
5'-CCGTCACGCCCTCGTCAGTGCCTTTTC-(biotin)-3'  
5'-CACCTGGCGGATCACTTCCATGT  
5'-GAAAAGGCACTGACGAGGCG-(biotin)-3'

2559  
2560  
2561

G953 Probe Set

P  
I  
A

FRET/TARGET SET 6  
5'-CCGTCACGCCCTCCCTCATCTCACT-(biotin)-3'  
5'-ACTCTGACTGTGTGCATAGCTCTT  
5'-AGTGAGGATGAGGGAGGCG-(biotin)-3'

2562  
2563  
2564

C923 Probe Set

P  
I  
A  
S

FRET/TARGET SET 7  
5'-AACGAGCGGCACGGTTTCTAGTGTC-NH2-3'  
5'-CTCACTCTCTGGCAGCATCTGAAT-3'  
3'-NH2-CGCGTGCCAAAGATCACAGT-5'  
5'-GCTGCCCCAGCTGC-NH2-3'

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2566  
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Lecithin cholesterol acyltransferase, human (h-LCAT)

C821 Probe Set (truncated Probe Design)

P  
I  
a  
s

FRET/TARGET SET 5  
5'-CCGCCGAGATCACGGTTATGCGCTG-NH2-3'  
5'-CCAGGGGGAGGTGGTC-3'  
3'-NH2-TCTAGTGCCCAATACGCGAGC-5'  
5'-CTGCTCTTTCAGCTTGATGCTGG-NH2-3'

2569  
2570  
2571  
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C827 Probe Design

P  
I  
a

FRET/TARGET SET 8  
5'-GAACGGCAGGTTTGGGTGGTGTATGCG-NH2-3'  
5'-AGAGGGAAACATCCAGGGGGAG-3'  
3'-NH2-CGTCCAAACCCACCACCAATACGC-5'

2573  
2574  
2575



C1217 Probe Design

p 5'-CCGCCGAGATCAGGAGATGCTGTATCCC-NH2-3' 2576  
l 5'-GGTCAGGTTGCTGAAGACCATGTTG-3' 2577  
a 3'-NH2-TCTAGTCTCTACGACATAGGG-5' 2578

Apolipoprotein A-1, human (h-ApoA1)

A177 Probe Set

p 5'-CCGTCACGCCTCTGAGCACATCCACG-NH2-3' 2579  
l 5'-ACATAGTCTCTGCCGCTGTCTTA-3' 2580  
a 3'-NH2-GCGGAGACTCGTGTAGGTGC-5' 2581  
s 5'-TACACAGTGCGCAGGTCCTT-NH2-3' 2582

A227 Probe Set (titrate length of 2'-O-Me in Invader)

p 5'-GAACGGCAGGTTTGCCCAAGCGG-NH2-3' 2583  
l 5'-GTCAAGGAGCTTTAGGTTTAGCTGTTTA-3' 2584  
i 5'-GTCAAGGATCTTTAGGTTTAGCTGTTTA-3' 2585  
i 5'-GTCCCAGTTGTCAAGGATCTTTAGGTTTAGCTGTTTA-3' 2586  
A 3'-NH2-GTCCAAACAGGTTCCGCC-5' 2587  
s 5'-AGCCTTCAAACTGGGACACATAGTCTC-NH2-3' 2588

G350 Probe Set

p 5'-CCGCCGAGATCACTTCTGTCTCCTT-NH2-3' 2589  
l 5'-CTCCTGCCCTCAGGCCG-3' 2590  
a 3'-NH2-TCTAGTGGAGACAGAGAA-5' 2591  
s 5'-TTCCAGGTTATCCCAGAACTCC-NH2-3' 2592

G233 Probe Set

p 5'-AGAACGGCAGTCTTCTGTTTTCCCAAG-NH2-3' 2593  
l 5'-CCAGTTGTCAAGGAGCTTTAGGTTTAGT-3' 2594  
a 3'-NH2-CGTCAGAAAGACAAAAGGGTCC-5' 2595  
s 5'-CGGAGCCTTCAAACTGGGACACATAGT-NH2-3' 2596

Metabotropic Glutamate Receptor 1, rat (r-mGluR1)

T934 Probe Set

p 5'-AGAACGGCAGTCTTTAGAAATAGCGATCTGT-NH2-3' 2597  
l 5'-CACTCAGGTCTATGCTTGTGGCT-3' 2598  
a 3'-NH2-GTCAGAACTTTATCCGCTAGACA-5' 2599  
s 5'-GGGATGTCGAACAGCTGGAGAAGATTCT-NH2-3' 2600

Ubiquitin, human (h-UBI1Q)

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G119 Probe Set (MO4 Arm)

p 5'-CCGTCACGCGCTCTTACATTTTCTATCGTATCCG-(biotin)-3'  
l 5'-CCTTCCTTATCCTGGATCTTGGA-3'  
a 3'-(biotin)-GCGGAGGAAATGTAAAGATAGCATAGGC-5'

FRET/TARGET SET 6

2601  
2602  
2603

G119 Probe Set

p 5'-CGCGAGATCACCTTTACATTTTCTATCGTATCCG-(biotin)-3'  
l 5'-CCTTCCTTATCCTGGATCTTGGA-3'  
a 3'-(biotin)-CTAGTGGAATGTAAAGATAGCATAGGC-5'

FRET/TARGET SET 5

2604  
2605  
2606

G131 Probe Set

p 5'-CATCTTCGCGGACTGGATCTTGGCC-(biotin)-3'  
l 5'-GCTGATCAGGAGGAAATCCTTCTTATCT-3'  
a 3'-(biotin)-GCCTGACCTAGAACCCGG-5'

FRET/TARGET SET 9

2607  
2608  
2609

Scanned G119 region (ELISA format (No Arrestors)

p 5'-CTCTCTCGTCTCTTACATTTTCTATCGTATCCG-NH2-3'  
p 5'-CTCTCTCGTCTCTTACATTTTCTATCGTATCCG-NH2-3'  
p 5'-CTCTCTCGTCTCTTACATTTTCTATCGTATCCG-NH2-3'  
p 5'-CTCTCTCGTCTCTTACATTTTCTATCGTATCCG-NH2-3'  
p 5'-CTCTCTCGTCTCGCCTTACATTTTCTATCG-NH2-3'  
l 5'-GGAATTCCTTCTCTATCGTGGATCTTGA-3'  
l 5'-GGAATTCCTTCTCTATCGTGGATCTTGGC-3'  
l 5'-CCTTCCTTATCCTGGATCTTGGA-3'  
l 5'-TTCCTTATCCTGGATCTTGCCA-3'  
l 5'-TCCTTATCCTGGATCTTGGCCTA-3'

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Ubiquitin, mouse (m-UBI)

G294 Probe Set  
p 5'-CCGTCACGCGCTCTCTGGATGTTGA-(biotin)-3'  
l 5'-CCAGGTGCAGGGTTGACTA-3'  
a 3'-(biotin)-GCGGAGGAAAGACCTACAACAT-5'

FRET/TARGET SET 7

2620  
2621  
2622

G294 Probe Set

p 5'-CGCGAGATCACCCCTTCTGGATGTTGA-(biotin)-3'  
l 5'-CCAGGTGCAGGGTTGACTA-3'  
a 3'-(biotin)-CTAGTGGGAAGACCTACAACAT-5'

FRET/TARGET SET 5

2623  
2624  
2625

G294 Probe Set

p 5'-CCGTCACGCGCTCTCTGGATGTTGTAAT-NH2-3'  
l 5'-CCAGGTGCAGGGTTGACTA-3'

FRET/TARGET SET 6

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2628

3'-NH2-GCGGAGGGAAGACCTACAACATTA-5'

a

G294 Probe Set

p  
i  
a

FRET/TARGET SET 6

5'-CCGTACAGCCTCCCTTCTGGATGTTGTAATC-NH2-3'

5'-CCAGGTGCAGGGTTGACTA-3'

3'-NH2-GCGGAGGGAAGACCTACAACATTAG-3'

2629  
2630  
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T514 Probe Set

p  
i  
a

FRET/TARGET SET 7

5'-AACGAGGCGCACATGTTGTAATCAGAGAGGG-NH2-3'

5'-TGCAGGGTTGACTCTTTCTGGA-3'

3'-NH2-CGCGTGTACAACATTAGTCTCTCCCC-5'

2632  
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G750 Probe Set

p  
i  
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FRET/TARGET SET 9

5'-CATCTTCGCGGACCTTCTGGATGTTGTA-NH2-3'

5'-GGACCAAGTGCAGGGTTGACTT-3'

3'-NH2-GCCTGGAAGACCTACAACAT-5'

2635  
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G185 Probe Set

p  
i  
a

FRET/TARGET SET 9

5'-CATCTTCGCGGACCTTCTGGATGTTGTA-NH2-3'

5'-CCCTCTTTATCCTGGATCTTGGCA-3'

3'-NH2-GCGCCTGAAGTGCAAGAGAGCTACC-5'

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FIGURE 49

| Secondary system              |  |  | Oligo Sequence (5' to 3')           |  | SEQ ID NO: |
|-------------------------------|--|--|-------------------------------------|--|------------|
| FRET probe                    |  |  | FL-CAC-Z28-TGC TTC GTG G            |  | 2868       |
| Secondary Reaction Template 1 |  |  | CCA GGA AGC AAG TGG TGC GCC TCG tt  |  | 2869       |
| Secondary Reaction Template 2 |  |  | CCA GGA AGC AAG TGG AGG CGT GAC ggt |  | 2870       |
| Secondary Reaction Template 3 |  |  | CCA GGA AGC AAG TGA CGC AGC GAC ggt |  | 2871       |

| Assays                 |   |          | SRT # | Oligo Type | Oligo Sequence (5' to 3')              | SEQ ID NO: |
|------------------------|---|----------|-------|------------|--|------------|
| human v-FOS            | 2 | Probe    | 2     | Probe      | CCGTCACGCGCTCGTCATCAGGGAT NH2          | 2872       |
|                        |   | Invader  |       | Invader    | CTCTTCTGGGAAGCCOCAGA                   | 2873       |
|                        |   | Stacker  |       | Stacker    | cttgaggcaggt                           | 2874       |
|                        |   | Arrestor |       | Arrestor   | atccctgatgacgagggc                     | 2875       |
| human v-FOS            | 2 | Probe    | 2     | Probe      | CCGTCACGCGCTCCAGCAGGTTG NH2            | 2876       |
|                        |   | Invader  |       | Invader    | ACTCTAGTTTTTCTTCTCCTTA                 | 2877       |
|                        |   | Stacker  |       | Stacker    | gcaatctggctgc                          | 2878       |
|                        |   | Arrestor |       | Arrestor   | ccaagggtctggagggc                      | 2879       |
| human v-FOS            | 2 | Probe    | 2     | Probe      | CCGTCACGCGCTCAGAGGCGG NH2              | 2880       |
|                        |   | Invader  |       | Invader    | GGCTCAGGGTCATTGAGGC                    | 2881       |
|                        |   | Stacker  |       | Stacker    | tgaaggctctc                            | 2882       |
|                        |   | Arrestor |       | Arrestor   | ccctgcctctgagggc                       | 2883       |
| mouse interferon gamma | 2 | Probe    | 2     | Probe      | CCG TCA CGC CTC CCT TTT GCC AGT TG NH2 | 2884       |
|                        |   | Invader  |       | Invader    | GCT CTG CAG GAT TTT CAT GTC ACC ATA    | 2885       |
|                        |   | Stacker  |       | Stacker    | ctc cag ata tcc aag aag ag             | 2886       |
|                        |   | Arrestor |       | Arrestor   | gaa ctg gca aaa ggg agg cg             | 2887       |
| mouse interferon gamma | 1 | Probe    | 1     | Probe      | AAC GAG GCG CAC CCTTTTGCAGTTG NH2      | 2888       |
|                        |   | Arrestor |       | Arrestor   | gaactggcaaaaggggtcg                    | 2889       |

146



|                          |   |   |   |      |
|--------------------------|---|---|---|------|
| mouse interferon gamma   | 2 | Probe<br>Invader<br>Stacker<br>Arrestor | CCG TCA CGC CTC CCT TTT GCC AGT TA NH2    | 2890 |
|                          |   |   | GCT CTG CAG GAT TTT CAT GTC ACC ATA       | 2891 |
|                          |   |   | ctc cag ata tcc aag aag ag                | 2892 |
|                          |   |   | gaa ctg gca aaa ggg agg cg                | 2893 |
| mouse interferon gamma   | 2 | Probe                                   | CCG TCA CGC CTC CCT TTT GCC AGT TT NH2    | 2894 |
| mouse interleukin 10     | 2 | Probe<br>Invader<br>Stacker<br>Arrestor | CCG TCA CGC CTC AGT TGT TTC CGT C NH2     | 2895 |
|                          |   |   | AGA GGT ACA AAC GAG GTT TTC CAA GGC       | 2896 |
|                          |   |   | agc taa gat ccc tgg atc aga ttg aga ga    | 2897 |
|                          |   |   | aac gga aac aac tga ggc g                 | 2898 |
| mouse interleukin 10     | 2 | Probe                                   | CCGTCACGCCTCAGTTGTTCCGTT NH2              | 2899 |
| mouse interleukin 10     | 2 | Probe<br>Stacker                        | CCGTCACGCCTCAGTTGTTCCGTC NH2              | 2900 |
|                          |   |   | agctaagatccctgga                          | 2901 |
| mouse interleukin 10     | 2 | Probe                                   | CCGTCACGCCTCAGTTGTTCCGTC NH2              | 2902 |
| mouse interleukin 1 beta | 2 | Probe<br>Invader<br>Stacker<br>Arrestor | CCGTCACGCCTCTCATCTTTGGGG NH2              | 2903 |
|                          |   |   | GGTTTGGAAAGCAGCCCTA                       | 2904 |
|                          |   |   | tccgtcaacttcaagaacag                      | 2905 |
|                          |   |   | ccccaaaagatgagaggcg                       | 2906 |
| mouse interleukin 1 beta | 2 | Probe<br>Invader<br>Stacker<br>Arrestor | CCGTCACGCCTCTGTCGTTGCT NH2                | 2907 |
|                          |   |   | CCCCAAGGCCACAGGTATTTA                     | 2908 |
|                          |   |   | tggtctctgtacaaag                          | 2909 |
|                          |   |   | agcaacgacagaggcg                          | 2910 |
| mouse interleukin 1 beta | 2 | Probe<br>Invader<br>Stacker<br>Arrestor | CCGTCACGCCTCCTTTTATTACACAG NH2            | 2911 |
|                          |   |   | GGGTGGGTGTGCCGTA                          | 2912 |
|                          |   |   | gacaggtagattcttcc                         | 2913 |
|                          |   |   | ctgtgtaatgaaaggaggcg                      | 2914 |
| mouse interleukin 2      | 2 | Probe<br>Invader<br>Stacker<br>Arrestor | CCG TCA CGC CTC CCC TTT AGT TTT ACA A NH2 | 2915 |
|                          |   |   | GAA TTG GCA CTC AAA TGT GTT GTC AGA GA    | 2916 |
|                          |   |   | cag ta ctc tga tat tgc tga tga aat tct ca | 2917 |
|                          |   |   | gtt gta aaa cta aag ggg agg cg            | 2918 |

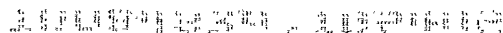
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|---------------------|---|---|--|------|
| mouse interleukin 2 | 1 | Probe<br>Stacker<br>Arrestor            | AACGAGCGCACCCCTTTAGTTTACA NH2              | 2919 |
|                     |   |   | acagttactctgatattgctg                      | 2920 |
|                     |   |   | tgt taa aac taa agg cgt gcg                | 2921 |
| mouse interleukin 2 | 2 | Probe<br>Stacker<br>Arrestor            | CCG TCA CGC CTC CCC TTT AGT TTT ACA A NH2  | 2922 |
|                     |   |   | cagttactctgatattgctg                       | 2923 |
|                     |   |   | tgt aaa act aaa ggg gag gc                 | 2924 |
| mouse interleukin 2 | 2 | Stacker                                 | acagttactctgatattgctg                      | 2925 |
| mouse interleukin 4 | 2 | Probe<br>Invader<br>Stacker<br>Arrestor | CCG TCA CGC CTC CTC CTG TGA CC NH2         | 2926 |
|                     |   |   | ACA TCC ATC TCC GTG CAT GGC CTC CCT TA     | 2927 |
|                     |   |   | tgc gtt caa aat gcc gat gac tct ca         | 2928 |
|                     |   |   | ggt cac agg agg agg cg                     | 2929 |
| mouse interleukin 4 | 2 | Probe<br>Stacker                        | CCG TCA CGC CTC CTC CTG TGA CC NH2         | 2930 |
|                     |   |   | tgc gtt caa aat gcc gat ga                 | 2931 |
| mouse interleukin 4 | 2 | Probe                                   | CCG TCA CGC CTC CTC CTG TGA CA NH2         | 2932 |
| mouse interleukin 4 | 2 | Probe<br>Stacker                        | CCG TCA CGC CTC CTC CTG TGA C NH2          | 2933 |
|                     |   |   | ctc ggt tca aaa tgc cga tga                | 2934 |
| mouse interleukin 4 | 2 | Probe                                   | CCG TCA CGC CTC CTC CTG TGA CT NH2         | 2935 |
| mouse interleukin 6 | 2 | Probe<br>Invader<br>Stacker<br>Arrestor | CCG TCA CGC CTC TCT TTT CTC ATT T NH2      | 2936 |
|                     |   |   | GTT CAT ACA ATC AGA ATT GCC ATT GCA CAA CA | 2937 |
|                     |   |   | cca cga tt ccc aga gaa c                   | 2938 |
|                     |   |   | aaa tga gaa aag aga ggc                    | 2939 |
| mouse interleukin 6 | 2 | Probe<br>Invader<br>Stacker<br>Arrestor | CCGTCACGCCTCAGGGAAGGCC NH2                 | 2940 |
|                     |   |   | TCCCTCCGGACTTGTGAAGTC                      | 2941 |
|                     |   |   | gtggtgtcaccagcat                           | 2942 |
|                     |   |   | ggccttcctgagcc                             | 2943 |
| mouse interleukin 6 | 2 | Probe<br>Invader<br>Stacker<br>Arrestor | CCGTCACGCCTCAGTGGTATCCT NH2                | 2944 |
|                     |   |   | GGTATAGACAGGTCTGTTGGGC                     | 2945 |
|                     |   |   | ctgtgaagtctctc                             | 2946 |
|                     |   |   | aggataccactgagcc                           | 2947 |

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100





|                                 |   |   |  |                              |
|---------------------------------|---|---|--|------------------------------|
| mouse tumor necrosis factor (a) | 1 | Probe<br>Arrestor                       | AACGAGGGCGCACTGATGATCTGAGT NH2<br>actcagatctctgtgcgc   | 2979<br>2980                 |
| mouse tumor necrosis factor (a) | 2 | Probe<br>Invader<br>Stacker<br>Arrestor | CCGTACGCGCTCTGGGAACCTTCTC NH2<br>ACTGATGAGAGGGAGGCCCATTA<br>atccctttggggac<br>gagaagttcccagaggcg | 2981<br>2982<br>2983<br>2984 |
| mouse tumor necrosis factor (a) | 2 | Probe<br>Invader<br>Stacker<br>Arrestor | CCGTACGCGCTCTCTGAGTAGTT NH2<br>TGTCACGAGCATCTTGTGTTTA<br>gttgaagctctgagcac<br>aactactcaggaggcg   | 2985<br>2986<br>2987<br>2988 |
| human v-JUN                     | 1 | Probe<br>Invader<br>Stacker<br>Arrestor | AACGAGGGCGCACCTCTGGCAAG NH2<br>GGGGCCGCAACACGGGA<br>cgggggacacccg<br>ctttgccagagggtgcgc          | 2989<br>2990<br>2991<br>2992 |
| human v-JUN                     | 2 | Probe<br>Invader<br>Stacker<br>Arrestor | CCGTACGCGCTCCATGCTCTGTTTT NH2<br>GGCCAGGTTCAAGGTA<br>caggatcttggggtta<br>aaacagagcatggaggc       | 2993<br>2994<br>2995<br>2996 |
| human v-JUN                     | 2 | Probe<br>Invader<br>Stacker<br>Arrestor | CCGTACGCGCTCAGTTGCTGAGG NH2<br>CAGCGCGCTGGGTTGAC<br>tttgcgtagaccgg<br>cctcagcaactgaggc           | 2997<br>2998<br>2999<br>3000 |
| human v-JUN                     | 2 | Probe<br>Stacker<br>Arrestor            | CCGTACGCGCTCCATGCTCTGTTTC NH2<br>aggatcttggggttact<br>gaaacagagcatggaggc                         | 3001<br>3002<br>3003         |
| human v-JUN                     | 2 | Probe<br>Invader<br>Stacker<br>Arrestor | CCGTACGCGCTCCGTAGACCGGC NH2<br>CTGGTTGAAGTTGCTGAGGTTTGA<br>ggctgcgtgacgg<br>gccggtctacggaggc     | 3004<br>3005<br>3006<br>3007 |
| human v-JUN                     | 1 | Probe<br>Invader<br>Stacker<br>Arrestor | AAC GAG GCG CAC TAA GAG CGC A NH2<br>GCCTTTGACAGGGAAGTTTCTCA<br>cgacccgcctgg<br>tgcgctcttagtgcgc | 3008<br>3009<br>3010<br>3011 |



|             |   |   |                              |      |
|-------------|---|---|------------------------------|------|
| human v-JUN | 1 | Probe<br>Invader<br>Stacker<br>Arrestor | AACGAGGCGCACTCGGACGG NH2     | 3012 |
|             |   |   | GTAGCCATAAGGTCGGCTCA         | 3013 |
|             |   |   | gaggaacgagggcgttga           | 3014 |
|             |   |   | ccgtccgagtgccg               | 3015 |
| human v-JUN | 2 | Probe<br>Invader<br>Stacker<br>Arrestor | CCGTCACGCCCTCCTCGGACGGG NH2  | 3016 |
|             |   |   | GTTACTGTAGCCATAAGGTCGGCTA    | 3017 |
|             |   |   | tggttcgagggcgttga            | 3018 |
|             |   |   | ccgtccgagggaggc              | 3019 |
| human v-JUN | 2 | Probe<br>Invader<br>Stacker<br>Arrestor | CCGTCACGCCCTCAAGTCCGCT NH2   | 3020 |
|             |   |   | GATCTTGGGGTTACTGTAGCCATC     | 3021 |
|             |   |   | ctcggacggagggaac             | 3022 |
|             |   |   | agcggaccttgagg               | 3023 |
| human v-MYC | 1 | Probe<br>Invader<br>Stacker<br>Arrestor | AACGAGGCGCACCTGTCTTGAG NH2   | 3024 |
|             |   |   | CAGGACTTGGGCGAGCTGA          | 3025 |
|             |   |   | aggtaggggaagac               | 3026 |
|             |   |   | ctcaacgacaggtgcgc            | 3027 |
| human v-MYC | 2 | Probe<br>Invader<br>Stacker<br>Arrestor | CCGTCACGCCCTCCGGCAAGGG NH2   | 3028 |
|             |   |   | TGCTATGGGCAAGTTTCGTGGATGA    | 3029 |
|             |   |   | ttcggacccgtg                 | 3030 |
|             |   |   | ccctgcccggaggc               | 3031 |
| human v-MYC | 2 | Probe<br>Invader<br>Stacker<br>Arrestor | CCGTCACGCCCTCCGGGTGTTGTA NH2 | 3032 |
|             |   |   | GAGAGTCGCGTCCTTGCTA          | 3033 |
|             |   |   | agttccagtgcacagt             | 3034 |
|             |   |   | tacaacacccggaggc             | 3035 |
| human v-MYC | 2 | Probe<br>Invader<br>Stacker<br>Arrestor | CCGTCACGCCCTCTTGCTGATGT NH2  | 3036 |
|             |   |   | GAGGAGGGCGCTGCGTAGA          | 3037 |
|             |   |   | gtggagacgtggcac              | 3038 |
|             |   |   | acatcagcacagaggc             | 3039 |
| human v-MYC | 1 | Probe<br>Invader<br>Stacker<br>Arrestor | AACGAGGCGCACTCGAGGTCA NH2    | 3040 |
|             |   |   | GGCTGCACCGAGTCGTAGA          | 3041 |
|             |   |   | tagttccgttggtgaag            | 3042 |
|             |   |   | tgacctcgagtgccg              | 3043 |

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Secondary system: Oligo Sequence (5' to 3')  
FRET probe RR-CTC-Z28-TTC TCA GTG CG  
Secondary Reaction Template CGC AGT GAG AAT GAG GTG ATC TCG GCg gt

SEQ ID NO:  
3056  
3057

Oligo Type Oligo Sequence (5' to 3')  
Probe 5'-CCG CCG AGA TCA CGT AGT TGA GGT CAA TGA AG-NH2-3'  
Invader 5'-gga atc ata ttG GAA CAT GTA AAC CAT C-3'  
Arrestor 5'-ctt cat tga cct caa cta cgt gat ct-3'

SEQ ID NO:  
3058  
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Mouse/Rat GAPDH Oligo Type Oligo Sequence (5' to 3')  
Probe 5'-CCG CCG AGA TCA CGT AGT TGA GGT CAA TGA AG-NH2-3'  
Invader aga atc ata ctG GAA CAT GTA GAC CAT C  
Invader gga gtc ata ctG GAA CAT GTA GAC CAT C  
Arrestor 5'-ctt cat tga cct caa cta cgt gat ct-3'

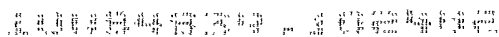
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mFabp4 Oligo Type Oligo Sequence (5' to 3')  
Probe CCGCCGAGATCACCACATCCCACCT NH2  
Invader CATCTCGTTTTCTCTCTTTATTGGTGGACTTTTA  
Stacker tctgacctgcacc  
Arrestor gtgggatgggtgac  
Probe CCGCCGAGATCACCACATCCCAC NH2  
Invader cgtttctctTTTATTGGTGGTGGACTTTTA  
Stacker tctgacctgcac

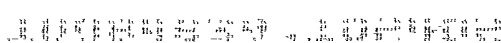
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mFabp4 Oligo Type Oligo Sequence (5' to 3')  
Probe CCGCCGAGATCACCCTTCTGCACC NH2  
Invader CTTTATTGGTGGTGGACTTTCCATCCCAA  
Stacker tgcaccagggoc  
Arrestor ggtagagaagggtgac

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| Protein | Region | Probe                | Invader               | Stacker      | Arrestor      |
|---------|--------|----------------------|-----------------------|--------------|---------------|
| mFbp4   | NH2    | CCGCCGAGATCACCACCGGC | CCATCCCACTTCTGCACCTGA | ccgccatctagg | ccctggtggtgac |
|         |        | 3074                 |                       |              |               |
|         |        | 3075                 |                       |              |               |
|         |        | 3076                 |                       |              |               |
| mFbp4   | NH2    | CCGCCGAGATCACCACCGGC | CCATCCCACTTCTGCACCTGA | ccgccatctagg | ccctggtggtgac |
|         |        | 3077                 |                       |              |               |
|         |        | 3078                 |                       |              |               |
|         |        | 3079                 |                       |              |               |
| mFbp4   | NH2    | CCGCCGAGATCACCACCGGC | CCATCCCACTTCTGCACCTGA | ccgccatctagg | ccctggtggtgac |
|         |        | 3080                 |                       |              |               |
|         |        | 3081                 |                       |              |               |
|         |        | 3082                 |                       |              |               |
| mFbp4   | NH2    | CCGCCGAGATCACCACCGGC | CCATCCCACTTCTGCACCTGA | ccgccatctagg | ccctggtggtgac |
|         |        | 3083                 |                       |              |               |
|         |        | 3084                 |                       |              |               |
|         |        | 3085                 |                       |              |               |
| mFbp4   | NH2    | CCGCCGAGATCACCACCGGC | CCATCCCACTTCTGCACCTGA | ccgccatctagg | ccctggtggtgac |
|         |        | 3086                 |                       |              |               |
|         |        | 3087                 |                       |              |               |
|         |        | 3088                 |                       |              |               |
| rRPS29  | NH2    | CCGCCGAGATCACCACCGGC | CCATCCCACTTCTGCACCTGA | ccgccatctagg | ccctggtggtgac |
|         |        | 3089                 |                       |              |               |
|         |        | 3090                 |                       |              |               |
|         |        | 3091                 |                       |              |               |
| rRPS29  | NH2    | CCGCCGAGATCACCACCGGC | CCATCCCACTTCTGCACCTGA | ccgccatctagg | ccctggtggtgac |
|         |        | 3092                 |                       |              |               |
|         |        | 3093                 |                       |              |               |
|         |        | 3094                 |                       |              |               |
| rRPS29  | NH2    | CCGCCGAGATCACCACCGGC | CCATCCCACTTCTGCACCTGA | ccgccatctagg | ccctggtggtgac |
|         |        | 3095                 |                       |              |               |
|         |        | 3096                 |                       |              |               |
|         |        | 3097                 |                       |              |               |



|            |          |   |      |
|------------|----------|---|------|
| rRPS29     | Probe    | CCGCCGAGATCACGTCGCTTAGTCC-NH2                 | 3097 |
|            | Invader  | GGTAGACAGTCGAATCATCCATTACAGC                  | 3098 |
|            | Arrestor | ggactaagcgacgtgac                             | 3099 |
| rat RPS29  | Probe    | 5'-CCGCCGAGATCACGCCCTATGTCCTT NH2-3'          | 3100 |
|            | Invader  | 5'-AGGTCGCTTAGTCCAACTTAATGAAC-3'              | 3101 |
|            | Stacker  | 5'-cgcgctactgacggaagcactgtc-3'                | 3102 |
|            | Arrestor | 5'-aaggacataggcgtgac-3'                       | 3103 |
| human RPL5 | Probe    | 5'-CCGCCGAGATCACGCTTCCGATGTACT NH2-3'         | 3104 |
|            | Invader  | 5'-GCATGTAATCTGCAACATTCTGCCCATGATGA-3'        | 3105 |
|            | Stacker  | 5'-TCTGCATTAAATTCCTTGCTTTTCAGAATCATACCAGGG-3' | 3106 |
|            | Arrestor | 5'-agtacatcgggaagcgtgac-3'                    | 3107 |
| human RPL5 | Probe    | 5'-CCGCCGAGATCACGCTTCCGA NH2-3'               | 3108 |
|            | Invader  | 5'-GCAACATTCTGCCCCATGATGT-3'                  | 3109 |
|            | Stacker  | 5'-tgtactctgcattaaattct-3'                    | 3110 |
|            | Arrestor | 5'-tcgggaagcgtgac-3'                          | 3111 |
| hACT       | Probe    | CCGCCGAGATCACTGGGTCATCTTCT-NH2                | 3112 |
|            | Invader  | GGGTGTTGAAGGTCTCAAACATGATCA                   | 3113 |
|            | Arrestor | agaagatgacccagtgac                            | 3114 |
| hACT       | Probe    | CCGCCGAGATCACAGCAGCCGTGG-NH2                  | 3115 |
|            | Invader  | CCAGGGAGGAGCTGGAC                             | 3116 |
|            | Arrestor | ccacggdctgtgac                                | 3117 |
| r/m ACT    | Probe    | CCGCCGAGATCACTGGGTCATCTTTT-NH2                | 3118 |
|            | Invader  | GGGTGTTGAAGGTCTCAAACATGATCA                   | 3119 |
|            | Arrestor | aaaagatgacccagtgac                            | 3120 |





|           |   |  |                              |
|-----------|---|--|------------------------------|
| hPGK      | Probe<br>Invader<br>Stacker<br>Arrestor | CCGCCGAGATACCCCATCCA-NH2<br>CTTTCAGGACCACAGTCCAAGA<br>gccagcaggtaigc<br>tgatggggtgac       | 3141<br>3142<br>3143<br>3144 |
| hRPL19    | Probe<br>Invader<br>Stacker<br>Arrestor | CCGCCGAGATCACCTTCCTTG-NH2<br>CTCTTCACGGGCTTGCGTGA<br>tcttagacctgagacc<br>ccaaggaagggtgac   | 3145<br>3146<br>3147<br>3148 |
| r/m RPL19 | Invader<br>Stacker                      | CTCCCGGCGCTTTCGTGA<br>tcttagacctgagacc   | 3149<br>3150                 |
| hRPL19    | Probe<br>Invader<br>Stacker<br>Arrestor | CCGCCGAGATCACTGCTTCCTTG-NH2<br>GCTCTTCACGGGCTTGCGA<br>gtcttagacctgagacc<br>caaggaagcagtgac | 3151<br>3152<br>3153<br>3154 |
| r/m RPL19 | Invader                                 | CCTCCCGGCGCTTTCGA  | 3155                         |

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| Analyte         | Oligo Type                    | Oligo Sequence (5' to 3')                                       | SEQ ID NO: |
|-----------------|-------------------------------|---|------------|
| Human GAPDH     | Probe                         | CGCCGAGATCACGATGATCTTGAGGGCT-NH <sub>2</sub>                    | 182        |
|                 | Invader                       | TGGTGCAGGAGGCATTGCTC  | 183        |
|                 | Arrestor                      | agcccaagatcatcgtatct  | 3156       |
|                 | FRET probe                    | Cy5-CTC-(Z28)-TTCTCAGTGCG                                       | 3157       |
|                 | SRT                           | CGC AGT GAG AAT GAG GTG ATC TCG GCg gt                          | 173        |
|                 | FRET probe                    | Cy5-CAC-(Z28)-TGCTTCGTGG  | 3158       |
|                 | SRT                           | CCAGGAAGCAAGTGGTGATCTCGGGcgt                                    | 3159       |
|                 | Probe                         | CGCCGAGATCACCTTTACATTTTCTATCGT-NH <sub>2</sub>                  | 169        |
|                 | Invader                       | CCTTCCTTATCCTGGATCTTGGCA  | 170        |
|                 | Arrestor                      | acgatagaaaaigtaaggtgac  | 171        |
| Human Ubiquitin | FRET probe (Epoch yellow dye) | Z38-CTC-(Z28)-TTCTCAGTGCG                                       | 3160       |
|                 | FRET probe (Epoch yellow dye) | 550-CTC-(Z28)-TTCTCAGTGCG                                       | 3161       |
|                 | SRT                           | CGC AGT GAG AAT GAG GTG ATC TCG GCg gt                          | 173        |
|                 | Probe                         | 5'-AAC GAG GCG CAC GTC ATA AAT ACC CC-NH <sub>2</sub> -3'       | 662        |
|                 | Invader                       | 5'-GCC AGC ATA GGC TGT TGA CAC-3'                               | 663        |
| Human CYP 3A7   | Stacker                       | agactttctatcacttttataacattc                                     | 664        |
|                 | Arrestor                      | ggggtatttatgacgtgcgc  | 665        |
|                 | FRET probe                    | F-TCC-(Z28)-ACTCCGAGCT  | 3162       |
|                 | FRET probe                    | RR-TCC-(Z28)-ACTCCGAGCT   | 3163       |
|                 | SRT                           | AGC TCG GAG TAG GAG TGC GCC TCG tt                              | 3164       |
|                 | SRT                           | AGC ACG GAG TAG GAG TGC GCC TCG tt                              | 3165       |
|                 | SRT                           | AGC CCG GAG TAG GAG TGC GCC TCG tt                              | 3166       |
|                 | SRT                           | AGC GCG GAG TAG GAG TGC GCC TCG tt                              | 3167       |
|                 | FRET probe                    | FL-CAC-Z28-TGC TTC GTG G  | 189        |
|                 | SRT (Epoch)                   | AGC GCG GAG TAG GAG TGC GCC TCG TTT                             | 3168       |
|                 | SRT (Epoch)                   | CC(A30) GGA AGC AAG TGG TGC GCC TCG TTT-Hex                     | 3169       |
|                 | SRT (Epoch)                   | CC(A30) GGA AGC AAG TGG TGC GCC TCG T(U33)T-Hex                 | 3170       |
|                 | SRT (Epoch)                   | CC(A30) GG(A30) AGC AAG TGG TGC GCC TCG T(U33)T-Hex             | 3171       |
|                 | SRT (Epoch)                   | CC(A30) GG(A30) (A30)GC AAG TGG TGC GCC TCG T(U33)T-Hex         | 3172       |
|                 | SRT (Epoch)                   | CC(A30) GG(A30) (A30)GC (A30)AG TGG TGC GCC TCG T(U33)T-Hex     | 3173       |
|                 | SRT (Epoch)                   | CC(A30) GG(A30) (A30)GC (A30)(A30)G TGG TGC GCC TCG T(U33)T-Hex | 3174       |



SEQ ID NO  
3175  
3176  
3177

Secondary system  
FRET probe  
Secondary Reaction Template 1  
Secondary Reaction Template 2  
Oligo Sequence (5' to 3')  
FL-CAC-Z28-TGC TTC GTG G  
CCA GGA AGC AAG TGG TGC GCC TCG tt  
CCA GGA AGC AAG TGG AGG CGT GAC ggt

SEQ ID NO

Oligo Sequence (5' to 3')

SRT # Oligo Type

Assays  
human CYP3A4  
2  
Probe  
Probe  
Invader  
Stacker  
Stacker  
Arrestor  
Arrestor  
Arrestor  
5'-CCG TCA CGC CTC GCC CCA CA-NH2-3'  
5'-CCG TCA CGC CTC GCC CCA CA-HEX-3'  
5'-CAG CAC AGG CTG TTG ACC ATC ATA AAA C-3'  
5'-ctttccatactttttatgacattc-3'  
5'-ctttccatactttttatgacattc HEX-3'  
5'-tggtggggcgaggcg-3'  
5'-tggtggggcgaggcg HEX-3'  
5'-tggtggggcgaggcg-3'

human CYP2C9  
2  
Probe  
Probe  
Invader  
Stacker  
Stacker  
Arrestor  
Arrestor  
Arrestor  
5'-CCG TCA CGC CTC ATG GAT AAT GCC C-NH2-3'  
5'-CCG TCA CGC CTC ATG GAT AAT GCC C-HEX-3'  
5'-CAG GTG AGA AAA GGC ATT ACA GAT AGT GAA AGC-3'  
5'-CAG AGG AAA GAG AGC TGC AGG G-3'  
5'-cag agg aaa gag agc tgc agg g HEX-3'  
5'-gggcattatccatgaggcg-3'  
5'-gggcattatccatgaggcg HEX-3'  
5'-gggcattatccatgaggcg-3'

h/r CYP1A2  
1  
Probe  
Invader  
Invader  
Arrestor  
Arrestor  
5'-AAC GAG GCG CAC GGA CTG TTT TCT GC-NH2-3'  
5'-ctgtcaagtcctgtatAGTGTCTCTC-3'  
5'-ctgtgtgaagtcgtatAGTGTCTCTC-3'  
5'-gcagaaaacagtcgagcg-3'  
5'-gcagaaaacagtcgagcg HEX-3'

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|              |   |          |   |      |
|--------------|---|----------|---|------|
| rat CYP2B2   | 2 | Probe    | 5'-CCG TCA CGC CTC AGA GCC AAT CAC-NH2-3'           | 679  |
|              |   | Probe    | 5'-CCG TCA CGC CTC AGA GCC AAT CAC-HEX-3'           | 3187 |
|              |   | Invader  | 5'-CGA TCA TCA AGG GAT GGT GGC CTG TGC-3'           | 680  |
|              |   | Stacker  | 5'-CTG ATC AAT CTC CTT TTG GAC TTT CTC TGC G-3'     | 681  |
|              |   | Stacker  | 5'-CTG ATC AAT CTC CTT TTG GAC TTT CTC TGC G HEX-3' | 3188 |
|              |   | Arrestor | 5'-gtgattggctctgaggcg -3'                           | 682  |
|              |   | Arrestor | 5'-gtgattggctctgaggcg HEX-3'                        | 3189 |
|              |   | Arrestor | 5'-gtgattggctctgaggcg -3'                           | 3190 |
|              |   | Probe    | 5'- CCG TCA CGC CTC CAC CAT ATC CC-NH2-3'           | 638  |
|              |   | Probe    | 5'- CCG TCA CGC CTC CAC CAT ATC CC-HEX-3'           | 3191 |
| human CYP2B6 | 2 | Invader  | 5'-CCA GCG GTT TCC ATT GGC AAA GAT CAA-3'           | 639  |
|              |   | Stacker  | 5'-cggaagaatgggtgaccatg-3'                          | 640  |
|              |   | Stacker  | 5'-cggaagaatgggtgaccatg HEX-3'                      | 3192 |
|              |   | Arrestor | 5'-gggatatggggaggcg-3'                              | 641  |
|              |   | Arrestor | 5'-gggatatggggaggcg HEX-3'                          | 3193 |
|              |   | Arrestor | 5'-gggatatggggaggcg -3'                             | 3194 |
|              |   | Probe    | 5'-AAC GAG GCG CAC TTG ACA GAG TCC-NH2-3'           | 1454 |
|              |   | Invader  | 5'-GCT TCT CCC ATT TGT CTA GCA TTA TAA-3'           | 1459 |
|              |   | Stacker  | 5'-GCC ATG ATT TTG ACA TAG GGT TTG AGG ATG-3'       | 1460 |
|              |   | Stacker  | 5'-GCC ATG ATT TTG ACA TAG GGT TTG AGG ATG HEX-3'   | 3195 |
| rat CYP4A3   | 1 | Arrestor | 5'-ggactctgcaagtgcg-3'                              | 1458 |
|              |   | Arrestor | 5'-ggactctgcaagtgcg HEX-3'                          | 3196 |
|              |   | Arrestor |   |      |

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100





|             |   |       |  |      |
|-------------|---|-------|--|------|
| human NR112 | 1 | Probe | 5'- AACGAGGGGCGACGCAACTCGCA NH2-3'                                 | 3197 |
|             |   |       | 5'- AACGAGGGGCGACGCAACTCGCA HEX-3'                                 | 3198 |
|             |   |       | 5'- AACGAGGGGCGACGCAACTCGCA 3-morpholino 1,2-propanediol-3'        | 3199 |
|             |   |       | 5'- AACGAGGGGCGACGCAACTCGCA 1,2-octanediol-3'                      | 3200 |
|             |   |       | 5'- AACGAGGGGCGACGCAACTCGCA methoxyphenyl-3'                       | 3201 |
|             |   |       | 5'- AACGAGGGGCGACGCAACTCGCA amine(C3)-3'                           | 3202 |
|             |   |       | 5'- AACGAGGGGCGACGCAACTCGCA amine(C6)-3'                           | 3203 |
|             |   |       | 5'- GGCCTGCAGAGACTCTGC -3'   | 3204 |
|             |   |       | 5'- gccactgtaagcac -3'   | 3205 |
|             |   |       | 5'- tgcgagttgcgtgcgc -3'   | 3206 |
|             |   |       | 5'- AAC GAG GCG CAC CTC CAA TCT CA NH2-3'                          | 3207 |
|             |   |       | 5'- AAC GAG GCG CAC CTC CAA TCT CA HEX-3'                          | 3208 |
|             |   |       | 5'- AAC GAG GCG CAC CTC CAA TCT CA 3-morpholino 1,2-propanediol-3' | 3209 |
| human ABCC2 | 1 | Probe | 5'- AAC GAG GCG CAC CTC CAA TCT CA 1,2 octanediol-3'               | 3210 |
|             |   |       | 5'- AAC GAG GCG CAC CTC CAA TCT CA methoxyphenyl-3'                | 3211 |
|             |   |       | 5'- AAC GAG GCG CAC CTC CAA TCT CA amine(C3)-3'                    | 3212 |
|             |   |       | 5'- AAC GAG GCG CAC CTC CAA TCT CA amine(C6)-3'                    | 3213 |
|             |   |       | 5'- CCC CCA CTA AGA TTT ATA CCC TTC TA -3'                         | 3214 |
|             |   |       | 5'- gcc aaa tct cct cca -3'  | 3215 |
|             |   |       | 5'- tga gat tgg agg tgc gc -3'                                     | 3216 |
|             |   |       | Invader  |      |
|             |   |       | Stacker  |      |
|             |   |       | Arrestor   |      |

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

FIGURE 48

| Assay            | SRT # | Oligo Type | Secondary system              | Oligo Sequence (5' to 3')               | SEQ ID NO |
|------------------|-------|------------|-------------------------------|---|-----------|
| Human CYP 2B6    | 1     | Probe      | FRET probe                    | FL-CAC-Z28-TGC TTC GTG G                | 3217      |
|                  |       | Invader    | Secondary Reaction Template 1 | CCA GGA AGC AAG TGG TGC GCC TCG tt      | 3218      |
|                  |       | Stacker    | Secondary Reaction Template 2 | CCA GGA AGC AAG TGG AGG CGT GAC ggt     | 3219      |
|                  |       | Arrestor   | Secondary Reaction Template 3 | CCA GGA AGC AAG TGA CGC AGC GAC ggt     | 3220      |
|                  |       | Stacker    |                               |   |           |
| Human CYP 2B6 e6 | 1     | Probe      |                               | AACGAGGCGCACCCACCATATCC-NH <sub>2</sub> | 3221      |
|                  |       | Invader    |                               | CCAGCGGTTTCCATTGGCAAAGATCAA             | 639       |
|                  |       | Stacker    |                               | ccggaagaatgggtgcaccatg                  | 3222      |
|                  |       | Arrestor   |                               | ggatatggtggtgcgc                        | 3223      |
|                  |       | Stacker    |                               | ccggaagaatgggtgcac                      | 3224      |
|                  | 2     | Probe      |                               | CCGTCACGCCTCGGTTGAGGTTT-NH <sub>2</sub> | 3225      |
|                  |       | Invader    |                               | CAGCAAGAGAGAGCGAGAGCGTGTGAC             | 1911      |
|                  |       | Stacker    |                               | tgtggtcgaattcactgtg                     | 3226      |
|                  |       | Arrestor   |                               | gaacctcaaccgaggcg                       | 3227      |
|                  |       | Stacker    |                               | tgtggtcgaattcact                        | 3228      |
| Human CYP 2E1    | 1     | Probe      |                               | CCGTCACGCCTCGGTTGAGGTTT-NH <sub>2</sub> | 3229      |
|                  |       | Stacker    |                               | ctgtggctgaattcactgtg                    | 3230      |
|                  |       | Arrestor   |                               | aacctcaaccgaggcg                        | 3231      |
|                  |       | Stacker    |                               | ctgtggctgaattcac                        | 3232      |
|                  |       | Probe      |                               | AACGAGGCGCACCCAGCCCA-NH <sub>2</sub>    | 3233      |
|                  | 2     | Invader    |                               | GCATCACCAACCATGCGGCTGA                  | 3234      |
|                  |       | Stacker    |                               | cgtacaggtgaacacccg                      | 3235      |
|                  |       | Arrestor   |                               | gcataccaccatcgcgctga                    | 3236      |
|                  | 3     | Probe      |                               |   |           |
|                  |       | Stacker    |                               |   |           |

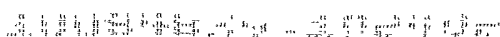




## FIGURE 48

|             |          |   |  |      |
|-------------|----------|---|--|------|
| 1           | Probe    | AACGAGGCGCACCCCTGAGTGC-NH <sub>2</sub>  | 3237                                     |      |
|             | Invader  | GCTGGCCTTGGTCTTA                        | 3238                                     |      |
|             | Stacker  | ttccagcaggaagtg                         | 3239                                     |      |
|             | Arrestor | gcactcagggtcgc                          | 3240                                     |      |
| 1           | Probe    | AACGAGGCGCACCCACGAGCA-NH <sub>2</sub>   | 3241                                     |      |
|             | Invader  | CTGTGCTTTTCCCTTCTCCATTTA                | 3242                                     |      |
|             | Stacker  | ggcagtcggtgagg                          | 3243                                     |      |
|             | Arrestor | tgctcgtgggtgcgc                         | 3244                                     |      |
| 1           | Probe    | AACGAGGCGCACCTTGGCACTAC-NH <sub>2</sub> | 3245                                     |      |
|             | Invader  | GGTTGTCATACAAAACAGAGTCCAGAGA            | 3246                                     |      |
|             | Invader  | gtcatcaaaaacaGAGTCCAGAGA                | 3247                                     |      |
|             | Stacker  | gacttgcccttgg                           | 3248                                     |      |
|             | Arrestor | gtagtccaagtcgc                          | 3249                                     |      |
| Rat CYP 4A2 | 1        | Probe                                   | AACGAGGCGCACCTTGGCAGGACA-NH <sub>2</sub> | 3250 |
|             | Invader  | gctacagaaatgagggcaAAAAGATGAGA           | 3251                                     |      |
|             | Stacker  | ctcagcagaaggatgg                        | 3252                                     |      |
|             | Arrestor | tgcttgccaagtgcgc                        | 3253                                     |      |
|             | Stacker  | ctcagcagaaggatgg                        | 3254                                     |      |
| 2           | Probe    | CCGTACAGCCTCTTGGCAGGACA-NH <sub>2</sub> | 3255                                     |      |
|             | Arrestor | tgcttgccaagagggcg                       | 3256                                     |      |
| 1           | Probe    | AACGAGGCGCACCTTGGCAGGAC-NH <sub>2</sub> | 3257                                     |      |
|             | Stacker  | actcagcagaaggatgg                       | 3258                                     |      |
|             | Arrestor | gtcttgccaagtgcgc                        | 3259                                     |      |
| 1           | Probe    | AACGAGGCGCACCTTGGCAGGA-NH <sub>2</sub>  | 3260                                     |      |
|             | Stacker  | cactcagcagaaggatgg                      | 3261                                     |      |
|             | Arrestor | ttctgccaagtcgc                          | 3262                                     |      |

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## FIGURE 48

|             |          |                   |   |       |
|-------------|----------|-------------------|---|-------|
| Rat CYP 4A2 | 1        | Probe             | AACGAGGGCGCACCCGATTGTCC-NH <sub>2</sub>         | 3263  |
|             | 2        | Invader           | gatttcaagaacattttaATTCATGATGA                   | 3264  |
|             |          | Stacker           | caagactctgagaactgaagg                           | 3265  |
|             |          | Arrestor          | ggacaatcgggtgcgc                                | 3266  |
|             |          | Probe             | CCGTCACGCCCTCCCGATTGTCC-NH <sub>2</sub>         | 3267  |
|             | Arrestor | ggacaatcgggaggcgc | 3268  |       |
| Rat CYP 4A2 | 1        | Probe             | AACGAGGGCGCACTACTATTATTTTCATAG-NH <sub>2</sub>  | 3269  |
|             | 2        | Invader           | CATTTCTATCTACTGTTCTGCATCAGA                     | 3270  |
|             |          | Stacker           | aaaagatgaggcatacattaattc                        | 3271  |
|             |          | Arrestor          | ctatgaaataatagtagtcgc                           | 3272  |
|             |          | Probe             | AACGAGGGCGCACTACTATTATTTTCATAGA-NH <sub>2</sub> | 3273  |
| Rat CYP 4A2 | 1        | Stacker           | aaagatgaggcatacattaattc                         | 3274  |
|             | 2        | Arrestor          | tctatgaaataatagtagtcgc                          | 3275  |
|             |          | Probe             | CCGTCACGCCCTCTACTATTATTTTCATAGA-NH <sub>2</sub> | 3276  |
|             |          | Arrestor          | tctatgaaataatagtaggcgc                          | 3277  |
|             |          | Rat CYP 4A2       | 1   | Probe |
| 2           | Invader  |                   | GGTCCACGCACAAGCTGGGAC                           | 3279  |
|             | Stacker  |                   | taaaagctacagaaaatgaggcc                         | 3280  |
|             | Arrestor |                   | ctccagacacctgtgcgc                              | 3281  |
|             | Probe    |                   | CCGTCACGCCCTCAGGTGTCTGGAG-NH <sub>2</sub>       | 3282  |
| Rat CYP 4A2 | 1        | Arrestor          | ctccagacacctgaggcg                              | 3283  |
|             | 2        | Probe             | AACGAGGGCGCACAGGTGTCTGGAGT-NH <sub>2</sub>      | 3284  |
|             |          | Stacker           | aaaagctacagaaaatgaggcc                          | 3285  |
|             |          | Arrestor          | actccagacacctgtgcgc                             | 3286  |



FIGURE 48

|                |   |   |  |      |
|----------------|---|---|--|------|
| Rat CYP Pan 3A | 2 | Probe<br>Invader (degenerate)<br>Stacker (degenerate)<br>Arrestor | CCGTCACGCCTCGTTCCTGGG-NH <sub>2</sub>      | 2028 |
|                |   |   | GAGCAAAACCTCATGYCAATRCAC                   | 3287 |
|                |   |   | tocattYccaaagggcag                         | 3288 |
|                |   |   | cccaggaacgaggcg                            | 2034 |
| Rat CYP 4A3    | 1 | Probe<br>Invader<br>Stacker<br>Arrestor                           | AACGAGGGCGCACTTTTGCTCCC-NH <sub>2</sub>    | 3289 |
|                |   |   | GGTCATAGAGCAGGACTCGTGA                     | 3290 |
|                |   |   | tgagcgcactgaag                             | 3291 |
|                |   |   | gggagcaaaaagtgcgc                          | 3292 |
|                | 2 | Probe<br>Arrestor   | CCGTCACGCCTCTTTTGTCTCCC-NH <sub>2</sub>    | 3293 |
|                |   |   | gggagcaaaaagaggcg                          | 3294 |
| Rat CYP 4A3    | 1 | Probe<br>Invader<br>Stacker<br>Arrestor                           | AACGAGGGCGCACGTTGTGATACCTT-NH <sub>2</sub> | 3295 |
|                |   |   | gatgaaggccataaattAAAAATTGTGC               | 3296 |
|                |   |   | tggtatggaacgtcc                            | 3297 |
|                |   |   | aaggatcacacaacgtgcgc                       | 3298 |
|                | 2 | Probe<br>Arrestor   | CCGTCACGCCTCGTTGTGATACCTT-NH <sub>2</sub>  | 3299 |
|                |   |   | aaggatcacacaacgaggcg                       | 3300 |
|                | 1 | Probe<br>Invader<br>Stacker<br>Arrestor                           | AACGAGGGCGCACTTGTGATACCTT-NH <sub>2</sub>  | 3301 |
|                |   |   | gatgaaggccataaattAAAAATTGTGGA              | 3302 |
|                |   |   | gggtatggaacgtccat                          | 3303 |
|                |   |   | aaaggatcacacaagtgcgc                       | 3304 |
|                | 2 | Probe<br>Arrestor   | CCGTCACGCCTCTTGTGATACCTT-NH <sub>2</sub>   | 3305 |
|                |   |   | aaaggatcacacaagaggcg                       | 3306 |

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FIGURE 48

|                   |   |          |   |      |
|-------------------|---|----------|---|------|
| Rat CYP 4A3       | 1 | Probe    | AACGAGGGCGCACCATAGGGACC-NH <sub>2</sub>             | 3307 |
|                   |   | Invader  | CCATTCTTGGACTTCAACACAAAGTCTTTGA                     | 3308 |
|                   |   | Stacker  | gggatccgtgtgg                                       | 3309 |
|                   |   | Arrestor | ggtccctatgggtgcgc                                   | 3310 |
|                   |   | Probe    | CCGTCACGCCTCCCATAGGGACC-NH <sub>2</sub>             | 3311 |
|                   | 2 | Arrestor | ggtccctatgggagggcg                                  | 3312 |
| Rat CYP 4A3       | 1 | Probe    | AACGAGGGCGCACATGACGGGACAC-NH <sub>2</sub>           | 3313 |
|                   |   | Invader  | GCTACAGAAATGAGGGCAAAAAAATGAGC                       | 3314 |
|                   |   | Stacker  | tcagcagaggtggg                                      | 3315 |
|                   |   | Arrestor | gtgcccgcatgtgcgc                                    | 3316 |
|                   |   | Probe    | CCGTCACGCCTCATGACGGGACAC-NH <sub>2</sub>            | 3317 |
|                   | 2 | Arrestor | gtgcccgcatgagggcg                                   | 3318 |
| Human/Mouse HES-1 | 1 | Probe    | AACGAGGGCGCACTGACTTTCTGTG-NH <sub>2</sub>           | 3319 |
|                   |   | Invader  | CGTCTTTTCTCCATAATAGGCTTTGAA                         | 3320 |
|                   |   | Stacker  | atcagatgtgtctttggt                                  | 3321 |
|                   |   | Arrestor | cacagaaagtcatgtgcgc                                 | 3322 |
|                   |   | Stacker  | gtcagatgtgtctttggt                                  | 3323 |
|                   |   | Stacker  | ctaagatgtgtctttggt                                  | 3324 |
|                   |   | Stacker  | ctgagatgtgtctttggt                                  | 3325 |
|                   |   | Stacker  | atcagaggcgtctttggt                                  | 3326 |
|                   |   | Stacker  | atcagaggcgtctttg                                    | 3327 |
|                   |   |          |   |      |
| rat HSP70-1,2     | 1 | Probe    | 5'- AAC GAG GCG CAC CCG GTT CTC NH <sub>2</sub> -3' | 3328 |
|                   |   | Invader  | 5'- GAT CTC CTC CGG GTA GAA CGA A -3'               | 3329 |
|                   |   | Stacker  | 5'- gcc ctt gta gtt cac -3'                         | 3330 |
|                   |   | Arrestor | 5'-gag aac cgg gtg cgc -3'                          | 3331 |
| rat HSP70-1,2     | 1 | Probe    | AACGAGGGCGCACACTCGAAGC-NH <sub>2</sub>              | 3332 |
|                   |   | Invader  | GGCGGGATGCCGCTCAC                                   | 3333 |
|                   |   | Stacker  | gccccagcagg   | 3334 |
|                   |   | Arrestor | gcttcgagtggtgcgc                                    | 3335 |

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FIGURE 48

|                 |   |          |  |      |
|-----------------|---|----------|--|------|
| rat HSP70-1,2,3 | 1 | Probe    | AACGAGGGCGCACCTGGATCA-NH <sub>2</sub>    | 3362 |
|                 |   | Invader  | CCCTCTCGCCCTCGTAA                        | 3363 |
|                 |   | Stacker  | gcacccgggc                               | 3364 |
|                 |   | Arrestor | tgatccagggtggtgcgc                       | 3365 |
| rat HSP70-1,2,3 | 1 | Probe    | AACGAGGGCGCACTCAGACCA-NH <sub>2</sub>    | 3366 |
|                 |   | Invader  | GGCGATCTCCTTCATCTTGA                     | 3367 |
|                 |   | Invader  | TGCAGTCTCCTTCATCTTGA                     | 3368 |
|                 |   | Stacker  | tggacgagatctctc                          | 3369 |
|                 |   | Arrestor | tggtgctgagtgcgc                          | 3370 |
| Human AGC 1,2   | 1 | Probe    | AACGAGGGCGCACCTAGCTC-NH <sub>2</sub>     | 3371 |
|                 |   | Invader  | AGTTCAGTTCTCTGAAGGGAGTA                  | 3372 |
|                 |   | Stacker  | tccaciatgtccagc                          | 3373 |
|                 |   | Arrestor | gagctagtgggtgcgc                         | 3374 |
| Human AGC 1,2   | 1 | Probe    | AACGAGGGCGCACCTTGTCTC-NH <sub>2</sub>    | 3375 |
|                 |   | Invader  | CGTCTCACACCAAGGAACTCATA                  | 3376 |
|                 |   | Stacker  | catagcagccttc                            | 3377 |
|                 |   | Arrestor | gagacaaggtgcgc                           | 3378 |
| rat GRM1        | 1 | Probe    | AACGAGGGCGCACCTTCTCATCTC-NH <sub>2</sub> | 3379 |
|                 |   | Invader  | GCATCGGTTACGCCCATCA                      | 3380 |
|                 |   | Stacker  | ggatggaaatcaggagt                        | 3381 |
|                 |   | Arrestor | gagatgagaaggtgcgc                        | 3382 |
|                 | 2 | Probe    | CCGTACAGCCTCCTTCTCATCTC-NH <sub>2</sub>  | 3383 |
|                 |   | Arrestor | gagatgagaagggcg                          | 3384 |
|                 | 3 | Probe    | CCGTGCTGCGTCTTCTCATCTC-NH <sub>2</sub>   | 3385 |
|                 |   | Arrestor | gagatgagaagcgag                          | 3386 |

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FIGURE 48

|          |   |   |   |      |
|----------|---|---|---|------|
| rat GRM1 | 1 | Probe<br>Invader<br>Stacker<br>Arrestor | AACGAGGCGCACCCCTTCTCATC-NH <sub>2</sub>       | 3387 |
|          |   |   | GCATCGGTTTCAGCCCATATA                         | 3388 |
|          |   |   | tcggatggaatatcagggag                          | 3389 |
|          |   |   | gatgagaagggtgcgc                              | 3390 |
|          |   |   | CCGTCACGCGCTCCCTTCTCATC-NH <sub>2</sub>       | 3391 |
| rat GRM2 | 2 | Probe<br>Arrestor                       | gatgagaaggaggcgc                              | 3392 |
|          |   |   | AACGAGGCGCACGAGAGATGAGGAGAGGG-NH <sub>2</sub> | 3393 |
|          |   |   | GGCCACGGAAGGACAGACAGGAAA                      | 3394 |
|          |   |   | cctctctcatctctctgcgc                          | 3395 |
|          |   |   | AACGAGGCGCACGAGAGATGAGGAGAGG-NH <sub>2</sub>  | 3396 |
| rat GRM2 | 1 | Probe<br>Invader<br>Arrestor            | GCCAGGAAAGGACAGACAGGAAC                       | 3397 |
|          |   |   | cctctctcatctctctgcgc                          | 3398 |
|          |   |   | AACGAGGCGCACGAGAGATGAGGAGAGG-NH <sub>2</sub>  | 3399 |
|          |   |   | ggaattcaagctaataaGATATCATGAA                  | 3400 |
|          |   |   | agctccaataggtaacagcc                          | 3401 |
| rat GRM5 | 1 | Probe<br>Invader<br>Stacker<br>Arrestor | ctgagttctctccagtgccgc                         | 3402 |
|          |   |   | AACGAGGCGCACCTGAGGAACTCAG-NH <sub>2</sub>     | 3403 |
|          |   |   | CAAGAGTGTGGGATCTGAGTTGAA                      | 3404 |
|          |   |   | gfatgcagcatggcc                               | 3405 |
|          |   |   | cttggaaggagtgccgc                             | 3406 |
| rat GRM5 | 1 | Probe<br>Invader<br>Stacker<br>Arrestor | gfatgcagcatggcctctc                           | 3407 |
|          |   |   | AACGAGGCGCACCTCGGCCCA-NH <sub>2</sub>         | 3408 |
|          |   |   | CCATCTGTACGTCATACCTGA                         | 3409 |
|          |   |   | gccatcactgcc                                  | 3410 |
|          |   |   | tggcccgagtgccgc                               | 3411 |
| rat GRM5 | 1 | Probe<br>Invader<br>Stacker<br>Arrestor | coatctgtcacGTCATACCTGA                        | 3412 |

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FIGURE 48

|                  |   |          |   |      |
|------------------|---|----------|---|------|
| rat GRM7         | 1 | Probe    | AACGAGGGCGCACGTCCTGTGC-NH <sub>2</sub>      | 3413 |
|                  |   | Invader  | AGTCTTTTCCAAATTCGCTCCTC                     | 3414 |
|                  |   | Stacker  | atttgcatctgtgtcttc                          | 3415 |
|                  |   | Arrestor | gcacaggagcgcgcg                             | 3416 |
|                  |   | Probe    | CCGTCACGGCCTCGTCCTGTGC-NH <sub>2</sub>      | 3417 |
|                  | 2 | Arrestor | gcacaggagcgaggcg                            | 3418 |
|                  |   | Probe    | AACGAGGGCGCACCTTCTTTTCATAAG-NH <sub>2</sub> | 3419 |
|                  |   | Invader  | CTTCTTTTCGTAGTTCTGCATTGCGA                  | 3420 |
|                  |   | Stacker  | ccacagaaattaaagctcttttg                     | 3421 |
|                  |   | Arrestor | cttatgaaagaaggtgcg                          | 3422 |
| rat TAC1         | 1 | Probe    | CCGTCACGGCCTCCTTCTTTTCATAAG-NH <sub>2</sub> | 3423 |
|                  |   | Arrestor | cttatgaaagaagggg                            | 3424 |
|                  |   | Probe    | CCG TCA CGC CTC GTC TTG GCC-NH <sub>2</sub> | 3425 |
|                  |   | Invader  | 5' GCC CAG AGA ATA GCG AGG TGC A 3'         | 3426 |
|                  |   | Stacker  | 5' ttc tcc atg tgc tca aag gfg g 3'         | 3427 |
|                  | 2 | Arrestor | 5' ggc caa gac gag ggc 3'                   | 3428 |
|                  |   | Probe    | AACGAGGGCGCACCTTTCAGTTTG-NH <sub>2</sub>    | 3429 |
|                  |   | Invader  | TCTATGTCATGTTTCACAGGTAAGAAATTTCTGA          | 3430 |
|                  |   | Stacker  | ctttctagatcttggc                            | 3431 |
|                  |   | Arrestor | caaaactgaaaggtgcg                           | 3432 |
| rat CYP 7A1      | 1 | Probe    | CCGTCACGGCCTCCTTTCAGTTTG-NH <sub>2</sub>    | 3433 |
|                  |   | Arrestor | caaaactgaaagggcg                            | 3434 |
|                  |   | Probe    | CCG TCA CGC CTC GTC TTG GCC-NH <sub>2</sub> | 3435 |
|                  |   | Invader  | 5' GCC CAG AGA ATA GCG AGG TGC A 3'         | 3436 |
|                  |   | Stacker  | 5' ttc tcc atg tgc tca aag gfg g 3'         | 3437 |
|                  | 2 | Arrestor | 5' ggc caa gac gag ggc 3'                   | 3438 |
|                  |   | Probe    | AACGAGGGCGCACCTTTCAGTTTG-NH <sub>2</sub>    | 3439 |
|                  |   | Invader  | TCTATGTCATGTTTCACAGGTAAGAAATTTCTGA          | 3440 |
|                  |   | Stacker  | ctttctagatcttggc                            | 3441 |
|                  |   | Arrestor | caaaactgaaaggtgcg                           | 3442 |
| human PPAR-alpha | 1 | Probe    | CCGTCACGGCCTCCTTTCAGTTTG-NH <sub>2</sub>    | 3443 |
|                  |   | Arrestor | caaaactgaaagggcg                            | 3444 |
|                  |   | Probe    | CCG TCA CGC CTC GTC TTG GCC-NH <sub>2</sub> | 3445 |
|                  |   | Invader  | 5' GCC CAG AGA ATA GCG AGG TGC A 3'         | 3446 |
|                  |   | Stacker  | 5' ttc tcc atg tgc tca aag gfg g 3'         | 3447 |
|                  | 2 | Arrestor | 5' ggc caa gac gag ggc 3'                   | 3448 |
|                  |   | Probe    | AACGAGGGCGCACCTTTCAGTTTG-NH <sub>2</sub>    | 3449 |
|                  |   | Invader  | TCTATGTCATGTTTCACAGGTAAGAAATTTCTGA          | 3450 |
|                  |   | Stacker  | ctttctagatcttggc                            | 3451 |
|                  |   | Arrestor | caaaactgaaaggtgcg                           | 3452 |





| Secondary system                    |   |            |                                  | SEQ ID NO |
|-------------------------------------|---|------------|----------------------------------|-----------|
| FRET probe                          |   |            |                                  | 3435      |
| Secondary Reaction Template 1       |   |            |                                  | 3436      |
| Secondary Reaction Template 2       |   |            |                                  | 3437      |
| Secondary Reaction Template 3       |   |            |                                  | 3438      |
| Oligo Sequence (5' to 3')           |   |            |                                  |           |
| FL-CAC-Z28-TGC TTC GTG G            |   |            |                                  |           |
| CCA GGA AGC AAG TGG TGC GCC TCG tt  |   |            |                                  |           |
| CCA GGA AGC AAG TGG AGG CGT GAC ggt |   |            |                                  |           |
| CCA GGA AGC AAG TGA CGC AGC GAC ggt |   |            |                                  |           |
| SRT #                               |   |            |                                  | SEQ ID NO |
| Assays                              |   |            |                                  |           |
| rat GPCR/CNS2                       | 1 | Oligo Type | Oligo Sequence (5' to 3')        |           |
|                                     |   |            | AACGAGGCGCACTCAGTGGAGAG - NH2    | 3439      |
|                                     |   |            | GGTCTGCCTCGTGAGCA                | 3440      |
|                                     |   |            | gtaagccaccacgatg                 | 3441      |
| human P53AIP1                       | 1 | Oligo Type | tctccactgagtgcgc                 | 3442      |
|                                     |   |            | 5'- AACGAGGCGCACCCAGGTGTG-NH2-3' | 3443      |
|                                     |   |            | 5'- TCACTGCAGGGACTTACCCAGA- 3'   | 3444      |
|                                     |   |            | tggtctgagccc                     | 3445      |
| human P53AIP1                       | 1 | Oligo Type | acacctgggtgcgc                   | 3446      |
|                                     |   |            | AACGAGGCGCACCCAGGTGT NH2         | 3447      |
|                                     |   |            | gtgtgtgagccc                     | 3448      |
|                                     |   |            | AACGAGGCGCACCCCTTCCTCT NH2       | 3449      |
| human P53AIP1                       | 1 | Oligo Type | GGAGGAGGAGGGGTGGA                | 3450      |
|                                     |   |            | tgggactatgatcaggg                | 3451      |
|                                     |   |            | agaggagggtgcgc                   | 3452      |
|                                     |   |            | AACGAGGCGCACCTTCATTATTGGC NH2    | 3453      |
| human P53AIP1                       | 1 | Oligo Type | CCACAAGCTTCGAGTGGTCATA           | 3454      |
|                                     |   |            | cacaggaaacgactcttgg              | 3455      |
|                                     |   |            | gcccaataatgaagggtgcgc            | 3456      |
|                                     |   |            |                                  |           |

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|               |   |   |      |
|---------------|---|---|------|
| human P53AIP1 | 1 Probe<br>Invader<br>Stacker<br>Arrestor | AACGAGGCGCACCGCTGCGT NH2<br>GGCCCTGCACCTCAGAA<br>gtgagcttctgggg<br>agcgagcgggtgcgc                | 3457 |
|               |   |   | 3458 |
|               |   |   | 3459 |
|               |   |   | 3460 |
| mouse LLPL    | 1 Probe<br>Invader<br>Stacker<br>Arrestor | AACGAGGCGCACCTGTCCGTC NH2<br>CAGATTCAAGCCAGAGTGTGAAGTAGA<br>ttcttgagcaaggttag<br>agacggacaggtgcgc | 3461 |
|               |   |   | 3462 |
|               |   |   | 3463 |
|               |   |   | 3464 |
| mouse LLPL    | 1 Probe<br>Invader<br>Stacker<br>Arrestor | AACGAGGCGCACCTGTCCGTCT NH2<br>tcttgagcaaggttagt   | 3465 |
|               |   |   | 3466 |
|               |   |   | 3467 |
|               |   |   | 3468 |
| mouse LLPL    | 1 Probe<br>Invader<br>Stacker<br>Arrestor | AACGAGGCGCACCCAGAGTGTG NH2<br>GCAGAAAGCAGTTCAGATTTCAGA<br>aagtagctgtccgtct<br>cacactctgggtgcgc    | 3469 |
|               |   |   | 3470 |
|               |   |   | 3471 |
|               |   |   | 3472 |
| mouse LLPL    | 1 Probe<br>Invader<br>Stacker<br>Arrestor | AACGAGGCGCACCCAGAGTGT NH2<br>gaagtagctgtccgtc   | 3473 |
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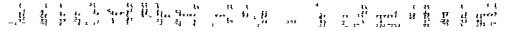


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|-------------------------------|---|----------|--|-------------------------------------|--|-----------|
| Secondary system              |   |          |  | Oligo Sequence (5' to 3')           |  | SEQ ID NO |
| FRET probe                    |   |          |  | FL-CAC-Z28-TGC TTC GTG G            |  | 3477      |
| Secondary Reaction Template 1 |   |          |  | CCA GGA AGC AAG TGG TGC GCC TCG tt  |  | 3478      |
| Secondary Reaction Template 2 |   |          |  | CCA GGA AGC AAG TGG AGG CGT GAC ggt |  | 3479      |
| Secondary Reaction Template 3 |   |          |  | CCA GGA AGC AAG TGA CGC AGC GAC ggt |  | 3480      |
| Oligo Type                    |   |          |  | Oligo Sequence (5' to 3')           |  | SEQ ID NO |
| mArbp                         | 1 | Probe    |  | AACGAGGCGCACCATGCGGATCT NH2         |  | 3481      |
|                               |   | Invader  |  | gcctccTCGGAGCGAA                    |  | 3482      |
|                               |   | Stacker  |  | gctgcattctgttggg                    |  | 3483      |
|                               |   | Arrestor |  | agatccgcattgtgcgc                   |  | 3484      |
| mArbp                         | 1 | Probe    |  | AACGAGGCGCACCTGCACATCAC NH2         |  | 3485      |
|                               |   | Invader  |  | CACCTTGTCTCCAGTCTTTATCAGA           |  | 3486      |
|                               |   | Stacker  |  | tcagaatttcaatgggccc                 |  | 3487      |
|                               |   | Arrestor |  | gtgatgtgcagggtgcgc                  |  | 3488      |
| mArbp                         | 1 | Probe    |  | AACGAGGCGCGCACCTGCACATCACT NH2      |  | 3489      |
|                               |   | Invader  |  | cagaatttcaatgtgtgcct                |  | 3490      |
|                               |   | Stacker  |  | AACGAGGCGCGCACCTCCACAGACAA NH2      |  | 3491      |
|                               |   | Arrestor |  | CAGTAAGTGGGAAGGTGTACTCAGTA          |  | 3492      |
| mArbp                         | 1 | Probe    |  | tgccaggagcgct                       |  | 3493      |
|                               |   | Invader  |  | ttgtctgtggagggtgcgc                 |  | 3494      |
|                               |   | Stacker  |  | AACGAGGCGCGCACCTCCAGGTG NH2         |  | 3495      |
|                               |   | Arrestor |  | TCTCCAGAGCTGGGTTGTTA                |  | 3496      |
| mArbp                         | 1 | Probe    |  | gccccctgalagcc                      |  | 3497      |
|                               |   | Invader  |  | accgtggagggtgcgc                    |  | 3498      |
|                               |   | Stacker  |  |                                     |  |           |
|                               |   | Arrestor |  |                                     |  |           |

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| Secondary system              |   |          | Oligo Sequence (5' to 3')                       | SEQ ID NO |
|-------------------------------|---|----------|---|-----------|
| FRET probe                    |   |          | FL-CAC-Z28-TGC TTC GTG G                        | 3574      |
| Secondary Reaction Template 1 |   |          | CCA GGA AGC AAG TGG TGC GCC TCG ttt             | 3575      |
| Secondary Reaction Template 2 |   |          | CCA GGA AGC AAG TGG AGG CGT GAC ggt             | 3576      |
| Secondary Reaction Template 3 |   |          | CCA GGA AGC AAG TGA CGC AGC GAC ggt             | 3577      |
| SRT # Oligo Type              |   |          | Oligo Sequence (5' to 3')                       | SEQ ID NO |
| Assays<br>human PTGS2         | 1 | Probe    | 5'-AACGAGGCGCACAGAGGTTAGAGAAG-NH2-3'            | 3578      |
|                               |   | Invader  | 5'-GGAGGAAGGGCTCTAGTATAATAGGC-3'                | 3579      |
|                               |   | Stacker  | 5'-gcttcccagctttttagc -3'                       | 3580      |
|                               |   | Arrestor | 5'-cttctaacctctgtgagc -3'                       | 3581      |
| human FACL1.2                 | 2 | Probe    | 5'-CCGTCACGCGCTCGTTGGCTCTTCCC-NH2-3'            | 3582      |
|                               |   | Invader  | 5'-GGCTTGGGCTTCCGTCTC-3'                        | 3583      |
|                               |   | Arrestor | 5'-gggaagagcaacgaggcg-3'                        | 3584      |
| rat RPS29                     | 2 | Probe    | 5'-CCGTCACGCGCTCGCCTATGTCCTT NH2-3'             | 3585      |
|                               |   | Invader  | 5'-AGGTCGCTTAGTCCAACCTTAATGAAC-3'               | 3586      |
|                               |   | Stacker  | 5'-cgcgtactgacggaagcactgtc-3'                   | 3587      |
|                               |   | Arrestor | 5'-aaggacatagggcgaggcg-3'                       | 3588      |
| human RPL5                    | 1 | Probe    | 5'-AACGAGGCGCACGCTTCCGATGTACT NH2-3'            | 3589      |
|                               |   | Invader  | 5'-GCATGTAACTGCAACATTCTGGCCCATGATGTA-3'         | 3590      |
|                               |   | Stacker  | 5'-TGTGCATTAAATTCCTTTCGCTTTCAGAATCATAACCAGGG-3' | 3591      |
|                               |   | Arrestor | 5'-agtacatcggaagcggtgagc-3'                     | 3592      |
|                               | 1 | Probe    | 5'-AACGAGGCGCACGCTTCCGA NH2-3'                  | 3593      |
|                               |   | Invader  | 5'-GCAACATTCTGGCCCATGATGTC-3'                   | 3594      |
|                               |   | Stacker  | 5'-tgtactctgcatataaattcct-3'                    | 3595      |
|                               |   | Arrestor | 5'-tgggaagcggtgagc-3'                           | 3596      |

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|                |   |   |  |                              |
|----------------|---|---|--|------------------------------|
|                | 1 | Probe<br>Invader<br>Stacker<br>Arrestor | 5'-AACGAGGCGCACCTTCCGAT NH2-3'<br>5'-GCAACATTCTGGCCCCATGATGTGA-3'<br>5'-gtactctgcattaaattct-3'<br>5'-atcggaagggtgcgc-3'                              | 3597<br>3598<br>3599<br>3600 |
| human CD36     | 2 | Probe<br>Invader<br>Stacker<br>Arrestor | 5'-CCGTCACGCGCTCTCTTTGCTTAAC NH2-3'<br>5'-CATTTTCTCTGGCTAGAAACGAACTCTGTACGTATAAGGACA-3'<br>5'-tgaatgtgtcgtgttcacatca-3'<br>5'-gttaagcaaaagaggagcg-3' | 3601<br>3602<br>3603<br>3604 |
| human ALOX15   | 2 | Probe<br>Invader<br>Stacker<br>Arrestor | 5'-CCGTCACGCGCTCCGATTCCCTCCA NH2-3'<br>5'-CAGCTCTGTCTTATAGTGGAGACTCAA-3'<br>5'-CATACCGATAGATGATTTCCAGAGCCGCG-3'<br>5'-tggagaagaatcgaggcg-3'          | 3605<br>3606<br>3607<br>3608 |
|                | 1 | Probe<br>Arrestor                       | 5'-AACGAGGCGCACCGAACAGTGT NH2-3'<br>5'-acactgttcggtgcgc-3'   | 3609<br>3610                 |
|                | 2 | Probe<br>Arrestor<br>Invader<br>Stacker | 5'-CCGTCACGCGCTCCGAACAGTGT NH2-3'<br>5'-acactgttcgaggcg-3'<br>5'-GCAGGAGAGTCAAGCTTA-3'<br>5'-gcctcctctcca-3'   | 3611<br>3612<br>3613<br>3614 |
|                | 1 | Probe<br>Arrestor                       | 5'-AACGAGGCGCACGTACTCGTAGG NH2-3'<br>5'-cctacgagtagtgcgc-3'  | 3615<br>3616                 |
|                | 2 | Probe<br>Arrestor<br>Invader<br>Stacker | 5'-CCGTCACGCGCTCGTACTCGTAGG NH2-3'<br>5'-cctacgagtagtgcgc-3'<br>5'-CACGCTGGGCGCGCAGC-3'<br>5'-gcatgtccagctttg-3'                                     | 3617<br>3618<br>3619<br>3620 |
| human EF1alpha | 2 | Probe<br>Invader<br>Stacker<br>Arrestor | 5'-CCGTCACGCGCTCTGTAGACATCCTG NH2-3'<br>5'-GCCAACAGGAACAGTACCAATACCACCAATTA-3'<br>5'-GAGAGGCGAGGCGCAAGGG-3'<br>5'-caggatgtctacaagaggcg-3'            | 3621<br>3622<br>3623<br>3624 |

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|-------------|---|----------|--|------|
| mouse ABCA1 | 2 | Probe    | 5' CCGTCACGCCCTCCCCGTTTTCT NH2-3'          | 3625 |
|             |   | Arrestor | 5' gaaaacggggaggcg 3'                      | 3626 |
|             | 1 | Probe    | 5'-AACGAGGGCGCACCCCGTTTTTC NH2-3'          | 3627 |
|             |   | Arrestor | 5'-gaaaacgggggtgcgc-3'                     | 3628 |
|             |   | Invader  | 5' GGGCATCTGTTGACCGTAGACAA 3'              | 3629 |
|             |   | Stacker  | 5' ttctcagatccgctc 3'                      | 3630 |
|             | 2 | Probe    | 5'-CCGTCACGCCCTCCCCGTTTTCT NH2-3'          | 3631 |
|             |   | Invader  | 5' GGGCATCTGTTGACCGTAGACAA 3'              | 3632 |
|             |   | Stacker  | 5'-ttctcagatccgctca-3'                     | 3633 |
|             |   | Arrestor | 5'-agaaaacggggaggcg-3'                     | 3634 |
| human ABCC2 | 1 | Probe    | 5'- AAC GAG GCG CAC CTC CAA TCT CA NH2-3'  | 3635 |
|             |   | Invader  | 5'- CCC CCA CTA AGA TTT ATA CCC TTC TA -3' | 3636 |
|             |   | Stacker  | 5'- gcc aaa tct cct oca -3'                | 3637 |
|             |   | Arrestor | 5'-tga gat tgg agg tgc gc -3'              | 3638 |
|             | 1 | Probe    | 5'-AACGAGGCGCACTCGGACTGT NH2-3'            | 3639 |
|             |   | Invader  | 5'-GCCATAATGTCCAGGTTTCACATCA-3'            | 3640 |
|             |   | Stacker  | 5'-ggcttcggaatcatgtt-3'                    | 3641 |
|             |   | Arrestor | 5'-acagtcgagtgcg-3'                        | 3642 |
|             | 1 | Probe    | 5'-AACGAGGCGCACCAACCTGTTCA NH2-3'          | 3643 |
|             |   | Invader  | 5'-CATCCACTGTGGAAATATCGCCGGA-3'            | 3644 |
| human NR112 |   | Stacker  | 5'-caatccggcctgtg-3'                       | 3645 |
|             |   | Arrestor | 5'-tgaacagggttggtgcgc-3'                   | 3646 |
|             | 1 | Probe    | 5'- AACGAGGCGCACGCAACTCGCA NH2-3'          | 3647 |
|             |   | Invader  | 5'- GGCC TGCAGAGACTCTGC -3'                | 3648 |
|             |   | Stacker  | 5'- gccactgtaagcac -3'                     | 3649 |
|             |   | Arrestor | 5'- tgcgagttgcgtgcgc -3'                   | 3650 |

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|             |          |   |      |
|-------------|----------|---|------|
| 1           | Probe    | 5'-AACGAGGGCGCACCCCTCTCTGA NH2-3'               | 3651 |
|             | Invader  | 5'-GCCCTTTTAAAGGAAAGGGCAACCTTGA-3'              | 3652 |
|             | Stacker  | 5'-tggctcgacctaca-3'                            | 3653 |
|             | Arrestor | 5'-tcagagaggggtgogc-3'                          | 3654 |
| 1           | Probe    | 5'-AACGAGGGCGCACGATAGCCAG NH2-3'                | 3655 |
|             | Invader  | 5'-TGCATCCTTACATGTTCATGACATTGAAGTC-3'           | 3656 |
|             | Stacker  | 5'-tggcctgtccc-3'                               | 3657 |
|             | Arrestor | 5'-ctggctatcgtgogc-3'                           | 3658 |
| 1           | Probe    | 5'-AACGAGGGCGCACGAGTGCT-3'                      | 3659 |
|             | Invader  | 5'-AAGTTGCTGGAAGCCACCTC-3'                      | 3660 |
|             | Stacker  | 5'-tccaagcagtaggaca-3'                          | 3661 |
|             | Arrestor | 5'-agacactggtgogc-3'                            | 3662 |
| human ABCB1 | Probe    | 5'-AAC GAG GCG CAC CAT CCA GAG NH2-3'           | 3663 |
|             | Invader  | 5'- CCT CCA AAA GGA AAC TGG AGG TAT ACT TTA -3' | 3664 |
|             | Stacker  | 5'- cct ctt tgg tac taa gc -3'                  | 3665 |
|             | Arrestor | 5'- ctc tgg atg gtg ogc -3'                     | 3666 |
| 1           | Probe    | 5'-AACGAGGGCGCACCTTCTATTAGTGA NH2-3'            | 3667 |
|             | Invader  | 5'-CAGATTTCATGAAGAACCCGTATCATTTGATATCAA-3'      | 3668 |
|             | Stacker  | 5'-tgtttgacatcagatctctaaat-3'                   | 3669 |
|             | Arrestor | 5'-tcactaatagaagggtgogc-3'                      | 3670 |
| 1           | Probe    | 5'-AACGAGGGCGCACAAATATCCTGTGCC NH2-3'           | 3671 |
|             | Invader  | 5'-CCCCGTAGAAACCTTACATTTATGGTCTC-3'             | 3672 |
|             | Stacker  | 5'-atcaactgaccatccctctgt-3'                     | 3673 |
|             | Arrestor | 5'-ggacaggattgtgogc-3'                          | 3674 |

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|   |          |   |      |
|---|----------|---|------|
| 1 | Probe    | 5'-AACGAGGGCGCACCATTTCTGCTG NH2-3'      | 3675 |
|   | Invader  | 5'-GATTCATCAGCTGCATTTTCTAATCAACTTA-3'   | 3676 |
|   | Stacker  | 5'-tcgtcattgacaagtttg-3'                | 3677 |
|   | Arrestor | 5'-cagcaggaaatggtgagc-3'                | 3678 |
| 2 | Probe    | 5'-CCGTACGCGCTCCATCCAGAG NH2-3'         | 3679 |
|   | Invader  | 5'-CCTCCAAAAGGAAACTGGAGGTATACTTTTA-3'   | 3680 |
|   | Stacker  | 5'-cctcttggtaactaac-3'                  | 3681 |
|   | Arrestor | 5'-ctctggatggagggc-3'                   | 3682 |
| 1 | Probe    | 5'-AACGAGGGCGCACCTTTCAAGGTG NH2-3'      | 3683 |
|   | Invader  | 5'-CTGTAGGCCCCCAAAGACGTA-3'             | 3684 |
|   | Stacker  | 5'-acaggctgctgt-3'                      | 3685 |
|   | Arrestor | 5'-cacctgaaaggcgccctcgtt-3'             | 3686 |
| 1 | Probe    | 5'-AACGAGGGCGCACCTTCACTCCAAAT NH2-3'    | 3687 |
|   | Invader  | 5'-TCTTGTGGATTGTTGAGAGAGTCGATGA-3'      | 3688 |
|   | Stacker  | 5'-gatgtctagatcacatc-3'                 | 3689 |
|   | Arrestor | 5'-atttgagtagagcgccctcgtt-3'            | 3690 |
| 1 | Probe    | 5'-AACGAGGGCGCACCTCACTCCAAAT NH2-3'     | 3691 |
|   | Invader  | 5'-TTGTGGATTGTTGAGAGAGTCGATGA-3'        | 3692 |
|   | Stacker  | 5'-gatgtctagatcacatc-3'                 | 3693 |
|   | Arrestor | 5'-atttgagtagagcgccctcgtt-3'            | 3694 |
| 1 | Probe    | 5'-AACGAGGGCGCACCATTAATGAAGGAGAG NH2-3' | 3695 |
|   | Invader  | 5'-GGGTGAGTGGCCAGTTCATAA-3'             | 3696 |
|   | Stacker  | 5'-aacacgtcgtcggtt-3'                   | 3697 |
|   | Arrestor | 5'-ctctccttcattatggtgagc-3'             | 3698 |

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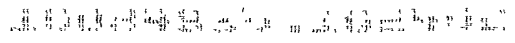
|   |   |   |      |
|---|---|---|------|
| 1 | Probe<br>Invader<br>Stacker<br>Arrestor | 5'-AACGAGGGCGCAGATAATGAAGGAGAG NH2-3'   | 3699 |
|   |   | 5'-GGTGAGTGGCCCTGTTTCATACC-3'           | 3700 |
|   |   | 5'-aacactgctggtgtt-3'                   | 3701 |
|   |   | 5'-ctctctcattatctgccc-3'                | 3702 |
| 1 | Probe<br>Invader<br>Stacker<br>Arrestor | 5'-AACGAGGGCGCACGAGAGCAAAACCT NH2-3'    | 3703 |
|   |   | 5'-ACTCTGATTAGAGCAAGTTTCATGTTTCATC-3'   | 3704 |
|   |   | 5'-catgccaatgcagttct-3'                 | 3705 |
|   |   | 5'-aggttgctctgctgccc-3'                 | 3706 |
| 1 | Probe<br>Invader<br>Stacker<br>Arrestor | 5'-AACGAGGGCGCACGTTTCAAGGTG NH2-3'      | 3707 |
|   |   | 5'-CTGTAGGGCCCCAAAGACGTC-3'             | 3708 |
|   |   | 5'-acaggctgctgt-3'                      | 3709 |
|   |   | 5'-cacctgaaacgtgcccctgtt-3'             | 3710 |
| 1 | Probe<br>Invader<br>Stacker<br>Arrestor | 5'-AACGAGGGCGCACCTTTCAAGGTG NH2-3'      | 3711 |
|   |   | 5'-CTGTAGGGCCCCAAAGACGTGA-3'            | 3712 |
|   |   | 5'-acaggctgctgt-3'                      | 3713 |
|   |   | 5'-cacctgaaagtgcccctgtt-3'              | 3714 |
| 1 | Probe<br>Invader<br>Stacker<br>Arrestor | 5'-AACGAGGGCGCACCTCACTCCAAAT NH2-3'     | 3715 |
|   |   | 5'-TCTTGTGGATTGTTGAGAGAGTCGATGA-3'      | 3716 |
|   |   | 5'-gaigtgctagtcacatc-3'                 | 3717 |
|   |   | 5'-attggagtgaggcgcccctgtt-3'            | 3718 |
| 1 | Probe<br>Invader<br>Stacker<br>Arrestor | 5'-AACGAGGGCGCACCTATAATGAAGGAGAG NH2-3' | 3719 |
|   |   | 5'-GGGTGAGTGGCCAGTTCATAA-3'             | 3720 |
|   |   | 5'-aacactgctggtgtt-3'                   | 3721 |
|   |   | 5'-ctctctcattatagtcgc-3'                | 3722 |

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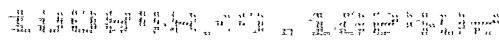
|             |   |   |                                      |      |
|-------------|---|---|--------------------------------------|------|
|             | 1 | Probe<br>Invader<br>Stacker<br>Arrestor | 5'-AACGAGGCGCAGATAATGAAGGAGAG NH2-3' | 3723 |
|             |   |   | 5'-GGGTGAGTGGCCAGTTCATATC-3'         | 3724 |
|             |   |   | 5'-aacactgctcgtggttt-3'              | 3725 |
|             |   |   | 5'-ctctcttcattatctgcgc-3'            | 3726 |
|             | 1 | Probe<br>Invader<br>Stacker<br>Arrestor | 5'-AACGAGGCGCACCGAGAGCAAAACC NH2-3'  | 3727 |
|             |   |   | 5'-TCTGACTAGAGCAAGTTTCATGTTCAA-3'    | 3728 |
|             |   |   | 5'-tcattgccaatgcagtttc-3'            | 3729 |
|             |   |   | 5'-ggtttgcctcggcggc-3'               | 3730 |
|             | 1 | Probe<br>Invader<br>Stacker<br>Arrestor | 5'-AACGAGGCGCAGGAGAGCAAAACCT NH2-3'  | 3731 |
|             |   |   | 5'-TCTGACTAGAGCAAGTTTCATGTTCAAC-3'   | 3732 |
|             |   |   | 5'-catgccaatgcagtttct-3'             | 3733 |
|             |   |   | 5'-aggtttgcctcggcggc-3'              | 3734 |
| rat SLC10A1 | 1 | Probe<br>Arrestor                       | 5'-AACGAGGCGCACAGCATGATAAGCA NH2-3'  | 3735 |
|             |   |   | 5'-tgcttatactgctgcgc-3'              | 3736 |
|             | 2 | Probe<br>Arrestor                       | 5'-CCGTCACGCCCTCAGCATGATAAGCA NH2-3' | 3737 |
|             |   |   | 5'-tgcttatactgctgcgc-3'              | 3738 |
|             | 1 | Probe<br>Arrestor<br>Invader<br>Stacker | 5'-GGTGCAGCCCGAGTGAGC-3'             | 3739 |
|             |   |   | 5'-gcaacattaacaccaggatgat-3'         | 3740 |
| human CD36  | 1 | Probe<br>Arrestor                       | 5'-AACGAGGCGCACGGAGGTGAATTAG NH2-3'  | 3741 |
|             |   |   | 5'-ctaattcacctccgctgcgc-3'           | 3742 |
|             | 2 | Probe<br>Arrestor                       | 5'-CCGTCACGCCCTCGGAGGTGAATTAG NH2-3' | 3743 |
|             |   |   | 5'-ctaattcacctccgagggc-3'            | 3744 |
|             | 1 | Probe<br>Arrestor<br>Invader<br>Stacker | 5'-TCACAGCCCAATTTTCTTGTTCAC-3'       | 3745 |
|             |   |   | 5'-tgtaagcaccctgttct-3'              | 3746 |
|             | 1 | Probe<br>Arrestor                       | 5'-AACGAGGCGCACGGAGGTGAATTA NH2-3'   | 3747 |
|             |   |   | 5'-taattcacctccgctgcgc-3'            | 3748 |
|             | 2 | Probe<br>Arrestor                       | 5'-CCGTCACGCCCTCGGAGGTGAATTA NH2-3'  | 3749 |
|             |   |   | 5'-taattcacctccgagggc-3'             | 3750 |
|             | 1 | Probe<br>Invader<br>Stacker             | 5'-TCACAGCCCAATTTTCTTGTTCAC-3'       | 3751 |
|             |   |   | 5'-gtgtaagcaccctgttct-3'             | 3752 |

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|               |         |                                      |  |      |
|---------------|---------|--------------------------------------|--|------|
|               | 1       | Probe                                | 5'-AACGAGGCGCACGACAGATTCCCTTT NH2-3'     | 3753 |
|               |         | Arrestor                             | 5'-aaaggaatctgtg'gcgc-3'                 | 3754 |
|               | 2       | Probe                                | 5'-CCGTACGCCTCGACAGATTCCCTTT NH2-3'      | 3755 |
|               |         | Arrestor                             | 5'-aaaggaatctgtcgaggcg-3'                | 3756 |
|               |         | Invader                              | 5'-ATGTCGCAGTGACTTTCCCAATAGC-3'          | 3757 |
|               |         | Stacker                              | 5'-taccttattatgtcgattatgg-3'             | 3758 |
|               | 1       | Probe                                | 5'-AACGAGGCGCACGGTTTTTCAACTG NH2-3'      | 3759 |
|               |         | Arrestor                             | 5'-cagttgaaaaccgtgcgc-3'                 | 3760 |
|               | 2       | Probe                                | 5'-CCGTACGCCTCGGTTTTTCAACTG NH2-3'       | 3761 |
|               |         | Arrestor                             | 5'-cagttgaaaaccgaggcg-3'                 | 3762 |
|               |         | Invader                              | 5'-TCTGTGCAGAAACAATAGTTGTCTGC-3'         | 3763 |
|               |         | Stacker                              | 5'-gagaggcaaggcct-3'                     | 3764 |
| human SLC21A6 | 1       | Probe                                | 5'-AACGAGGCGCACCGTATTTGAAGACATAAG NH2-3' | 3765 |
|               |         | Invader                              | 5'-GGCTGACCATACTGTTGCTCTAA-3'            | 3766 |
|               |         | Stacker                              | 5'-taaaagcaccataatagctgct-3'             | 3767 |
|               |         | Arrestor                             | 5'-cttatgtcttcaaatagcgg'gcgc-3'          | 3768 |
|               | 1       | Probe                                | 5'-AACGAGGCGCACCCAGCAGTAAAAACAT NH2-3'   | 3769 |
|               | Invader | 5'-aggtaaaaggACAAATGACATCAA-3'       | 3770                                     |      |
|               | Stacker | 5'-gagaattggcaattccaacg-3'           | 3771                                     |      |
|               |         | Arrestor                             | 5'-atgttttactgtg'gcgc-3'                 | 3772 |
| human SLC21A8 | 1       | Probe                                | 5'-AACGAGGCGCACCTACATATCCAATATC NH2-3'   | 3773 |
|               |         | Invader                              | 5'-CTTAGGAGTATTCTGATAGTGCTCAGATA-3'      | 3774 |
|               |         | Stacker                              | 5'-cacgtacattttagcaaacagagat-3'          | 3775 |
|               |         | Arrestor                             | 5'-gatattggatatgtaggtgcgc-3'             | 3776 |
|               | 1       | Probe                                | 5'-AACGAGGCGCACCAAGAGGATATCATC NH2-3'    | 3777 |
|               | Invader | 5'-cagatttaggggaaaTATAGAAGTTGAAAA-3' | 3778                                     |      |
|               | Stacker | 5'-gaagtaagaaaatgaaaatttggcaattcc-3' | 3779                                     |      |
|               |         | Arrestor                             | 5'-gatgatctctctgtg'gcgc-3'               | 3780 |



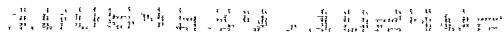


| Accession | Gene              | Probe    | Sequence                               | Position |
|-----------|-------------------|----------|--|----------|
| 3781      | human SLC21A9     | 1 Probe  | 5'-AACGAGGCGCACTAAATGTGGTACCT NH2-3'   | 3781     |
| 3782      |                   | Invader  | 5'-CAGGTTGAACAAATCTTCACAGTCAACAAGAA-3' | 3782     |
| 3783      |                   | Stacker  | 5'-cctgttcagagacaaga-3'                | 3783     |
| 3784      |                   | Arrestor | 5'-aggtaaccatttagtcgc-3'               | 3784     |
| 3785      | human SLC21A9     | 1 Probe  | 5'-AACGAGGCGCACGCTGTTGTC NH2-3'        | 3785     |
| 3786      |                   | Invader  | 5'-GCTGCAGTTGGTGTAGAAAAACCTGC-3'       | 3786     |
| 3787      |                   | Stacker  | 5'-cagagcatctggac-3'                   | 3787     |
| 3788      |                   | Arrestor | 5'-gacaacagcgtgcgc-3'                  | 3788     |
| 3789      |                   | 1 Probe  | 5'-AACGAGGCGCACCCAAAATCCTCA NH2-3'     | 3789     |
| 3790      |                   | Invader  | 5'-GGCTGGGCATCCAGGA-3'                 | 3790     |
| 3791      |                   | Stacker  | 5'-ggaacatgaactggatgcc-3'              | 3791     |
| 3792      |                   | Arrestor | 5'-tgaggatttgggtgcgc-3'                | 3792     |
| 3793      |                   | 1 Probe  | 5'-CCGTCACGCTCGCTAAGGCTC NH2-3'        | 3793     |
| 3794      |                   | Invader  | 5'-GTTCAATTCCTAACCTGACAGGAGATGC-3'     | 3794     |
| 3795      |                   | Stacker  | 5'-aaagaaggtagccaggc-3'                | 3795     |
| 3796      |                   | Arrestor | 5'-gagccttagcaggcg-3'                  | 3796     |
| 3797      | human SULT Pan 1A | 1 Probe  | 5'-AACGAGGCGCACCCCTTGACCTTC NH2-3'     | 3797     |
| 3798      |                   | Arrestor | 5'-gaagtcagggtgcgc-3'                  | 3798     |
| 3799      |                   | 2 Probe  | 5'-CCGTCACGCTCCCTTGACCTTC NH2-3'       | 3799     |
| 3800      |                   | Arrestor | 5'-gaaggtcaaggaggcg-3'                 | 3800     |
| 3801      |                   | Invader  | 5'-TTGCGTTGCGGGCAACATAGACCAA-3'        | 3801     |
| 3802      |                   | Invader  | 5'-TTGCGTTTCGGGCAACATAGACCAA-3'        | 3802     |
| 3803      |                   | Stacker  | 5'-tgatccaacagagctgg-3'                | 3803     |
| 3804      |                   | 1 Probe  | 5'-AACGAGGCGCACCCGCATCGAAG NH2-3'      | 3804     |
| 3805      |                   | Arrestor | 5'-cttcgatcggtgcgc-3'                  | 3805     |
| 3806      |                   | 2 Probe  | 5'-CCGTCACGCTCCCGCATCGAAG NH2-3'       | 3806     |
| 3807      |                   | Arrestor | 5'-cttcgatcggtgcgc-3'                  | 3807     |
| 3808      |                   | Invader  | 5'-CTGCCATCTTCTCCGCATAGTA-3'           | 3808     |
| 3809      |                   | Stacker  | 5'-cgctattctgcgc-3'                    | 3809     |

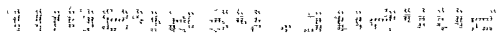


|   |          |                                     |      |
|---|----------|-------------------------------------|------|
| 1 | Probe    | 5'-AACGAGGGCGACCCGCATAGTC NH2-3'    | 3810 |
|   | Arrestor | 5'-gactatgagggtgcgc-3'              | 3811 |
|   | Probe    | 5'-CCGTACGGCTCCCGCATAGTC NH2-3'     | 3812 |
|   | Arrestor | 5'-gactatgagggtgcgc-3'              | 3813 |
|   | Invader  | 5'-TGCAGCCCTGCCATCTTCTA-3'          | 3814 |
| 2 | Stacker  | 5'-cgcatcgaagggtcga-3'              | 3815 |
|   | Probe    | 5'-AACGAGGGCGACCAATTGCCATAGC NH2-3' | 3816 |
|   | Arrestor | 5'-gctatgcaattgtgcgc-3'             | 3817 |
|   | Probe    | 5'-CCGTACGGCTCCAAATTGCCATAGC NH2-3' | 3818 |
|   | Arrestor | 5'-gctatgcaattgtgcgc-3'             | 3819 |
| 1 | Invader  | 5'-GAGGGATTTTGCCCAAGCATCAGA-3'      | 3820 |
|   | Stacker  | 5'-ttcttctctggaattctg-3'            | 3821 |
|   | Probe    | 5'-AACGAGGGCGACCGCTTTGCATT NH2-3'   | 3822 |
|   | Arrestor | 5'-aatgcaagggtgcgc-3'               | 3823 |
|   | Probe    | 5'-CCGTACGGCTCCGCTTTGCATT NH2-3'    | 3824 |
| 2 | Arrestor | 5'-aatgcaagggtgcgc-3'               | 3825 |
|   | Invader  | 5'-CAGCTCCCTTAGTCTCCATGA-3'         | 3826 |
|   | Stacker  | 5'-gtccatctgatcaccacac-3'           | 3827 |
|   | Probe    | 5'-AACGAGGGCGACCGGGCCAA NH2-3'      | 3828 |
|   | Arrestor | 5'-ttggcgcgtgcgtgcgc-3'             | 3829 |
| 1 | Probe    | 5'-CCGTACGGCTCCGACGGCCAA NH2-3'     | 3830 |
|   | Arrestor | 5'-ttggcgcgtgcgtgcgc-3'             | 3831 |
|   | Invader  | 5'-GTGATGAAGGCCCACTGTCAGCAA-3'      | 3832 |
|   | Stacker  | 5'-gaggaaaccaatcacgtcc-3'           | 3833 |

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| Assays   | SRT # | Oligo Type | Secondary system              | Oligo Sequence (5' to 3')                 | SEQ ID NO |
|----------|-------|------------|-------------------------------|---|-----------|
| hCEACAM5 | 1     | Probe      | FRET probe                    | FL-CAC-Z28-TGC TTC GTG G                  | 3834      |
|          |       | Invader    | Secondary Reaction Template 1 | CCA GGA AGC AAG TGG TGC GCC TCG ttt       | 3835      |
|          |       | Stacker    | Secondary Reaction Template 2 | CCA GGA AGC AAG TGG AGG CGT GAC ggt       | 3836      |
|          |       | Arrestor   | Secondary Reaction Template 3 | CCA GGA AGC AAG TGA CGC AGC GAC ggt       | 3837      |
| hCEACAM5 | 1     | Probe      |                               | AACGAGGCGCACTGTGAGCAGGA-NH <sub>2</sub>   | 3838      |
|          |       | Invader    |                               | GGTTCCAGAAAGGTTAGAAGTGAGGCA               | 3839      |
|          |       | Stacker    |                               | gcctctgccagg                              | 3840      |
|          |       | Arrestor   |                               | tcctgtcacagtgcgc                          | 3841      |
| hCEACAM5 | 1     | Probe      |                               | AACGAGGCGCACAAATCACTGCGCC-NH <sub>2</sub> | 3842      |
|          |       | Invader    |                               | CCATAGAGGACATTCAGGATGACTGC                | 3843      |
|          |       | Stacker    |                               | tggcactcactggg                            | 3844      |
|          |       | Arrestor   |                               | tcctgtcacagtgcgc                          | 3845      |
| hCEACAM5 | 1     | Probe      |                               | AACGAGGCGCACAAATCACTGCGCC-NH <sub>2</sub> | 3846      |
|          |       | Stacker    |                               | ctggcactcactgg                            | 3847      |
|          |       | Arrestor   |                               | gcgcagtgatttgccg                          | 3848      |
| hCEACAM5 | 2     | Probe      |                               | CCGTCACGCCTCCTTGCTGTGT-NH <sub>2</sub>    | 3849      |
|          |       | Invader    |                               | GGTTCTGGGTTTCACATTTGTAGA                  | 3850      |
|          |       | Stacker    |                               | cafttctgtgacatgaatagagt                   | 3851      |
|          |       | Arrestor   |                               | acacagcaaggaggcgc                         | 3852      |
| hCEACAM5 | 1     | Probe      |                               | AACGAGGCGCACCCACTGAGTAGA-NH <sub>2</sub>  | 3853      |
|          |       | Invader    |                               | GGTCCTACATCATTCCTTTGTGAA                  | 3854      |
|          |       | Stacker    |                               | gtgagggtcctggt                            | 3855      |
|          |       | Arrestor   |                               | ttctactcagtggtgcgc                        | 3856      |



| hCEACAM5 | 1 Probe  |   |      |
|----------|----------|---|------|
|          | Invader  | AACGAGCGCACCTTGCTGGAT-NH <sub>2</sub>         | 3857 |
|          | Stacker  | TTGGAGATAAAGAGCTCTTGTGTGTA                    | 3858 |
|          | Arrestor | gtccatcaatcaga                                | 3859 |
|          |          | atccagcaagtgcgc                               | 3860 |
| hNOS2A   | 2 Probe  | CCGTCACGCCTCGTTTCTATCTCCTTTGT-NH <sub>2</sub> | 3861 |
|          | Invader  | CGTCAGTTGGTCGGTTCCTGTTTC                      | 3862 |
|          | Arrestor | acaaggagatagaaacgaggcg                        | 3863 |
| hNOS2A   | 2 Probe  | CCGTCACGCCTCGTTTCTATCTC-NH <sub>2</sub>       | 3864 |
|          | Invader  | CGTCAGTTGGTCGGTTCCTGTTTC                      | 3865 |
|          | Stacker  | ctttgtaccgcttc                                | 3866 |
|          | Arrestor | gagatagaaacgaggcg                             | 3867 |
| hOSM     | 1 Probe  | AACGCGGCGCACTGTTGTTCT-NH <sub>2</sub>         | 3868 |
|          | Invader  | GCTGGGCCATGCAGTAGAA                           | 3869 |
|          | Stacker  | gagcccgaggatgt                                | 3870 |
|          | Arrestor | aggaaacaacagtcgc                              | 3871 |
| hOSM     | 1 Probe  | AACGAGGCGCACTGTTGTTCC-NH <sub>2</sub>         | 3872 |
|          | Stacker  | tgagcccgaggatgt                               | 3873 |
| hOSM     | 1 Probe  | AACGAGGCGCACGTCTGAGTTGT-NH <sub>2</sub>       | 3874 |
|          | Invader  | GTTGGCTCAGCCGTC                               | 3875 |
|          | Stacker  | ccagcagctggg                                  | 3876 |
|          | Arrestor | acaactcagacgtgcgc                             | 3877 |
| hICAM    | 2 Probe  | CCGTCACGCCTCGGCTTGTGTTC-NH <sub>2</sub>       | 3878 |
|          | Invader  | CCGGGATAGGTTCAGGGAGGCGTC                      | 3879 |
|          | Stacker  | ggttcatgggggtccct                             | 3880 |
|          | Arrestor | gaacacacaagccgaggcg                           | 3881 |



|          |   |   |                              |
|----------|---|---|------------------------------|
| hICAM    | 1 Probe<br>Invader<br>Stacker<br>Arrestor | AACGAGGCGCACGGCTTGTGT-NH <sub>2</sub><br>GATAGGTTACAGGAGGCGTC<br>gttcggttcacggg<br>acacaagccgtgcgc                  | 3882<br>3883<br>3884<br>3885 |
| hICAM    | 1 Probe<br>Invader<br>Stacker<br>Arrestor | AACGAGGCGCACGTATTTCTTGATCTTC-NH <sub>2</sub><br>TTTTGGCCTGTTGTAGTCTC<br>cgctggcggttagag<br>gaagatcaagaaatcgtgcgc    | 3886<br>3887<br>3888<br>3889 |
| hICAM    | 1 Probe<br>Invader<br>Stacker<br>Arrestor | AACGAGGCGCACACCATGGC-NH <sub>2</sub><br>CTAGTGTTTTAGGTGTCAGGTC<br>cccaaatcgtgtgtatct<br>gccatgggtgcgc               | 3890<br>3891<br>3892<br>3893 |
| hICAM    | 1 Probe<br>Invader<br>Stacker<br>Arrestor | AACGAGGCGCACACCATGGCC-NH <sub>2</sub><br>CTAGTGTTTTAGGTGTCAGGTC<br>ccaaatcgtgtgtatcga<br>ggccatgggtgcgc             | 3894<br>3895<br>3896<br>3897 |
| Neomycin | 1 Probe<br>Invader<br>Stacker<br>Arrestor | AACGCGGCGCACGCCATTTTCCAC-NH <sub>2</sub><br>CCACAGTCGATGAATCCAGAAAAAGCGA<br>catgatattcggaagcag<br>tggaatatggcgtgcgc | 3898<br>3899<br>3900<br>3901 |
| Neomycin | 1 Probe<br>Stacker                        | AACGCGGCGCACGCCATTTTCCA-NH <sub>2</sub><br>ccatgatattcggaagcag  | 3902<br>3903                 |

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|----------|----------|--|------|
| Neomycin | 1 Probe  | AACGAGGCGCACCGATTTCATTGAG-NH <sub>2</sub>  | 3904 |
|          | Invader  | CGCTGCCTCGTCCTGA                           | 3905 |
|          | Stacker  | ggcaccggacagg                              | 3906 |
|          | Arrestor | ctgaatgaactggggcgc                         | 3907 |
| hMMP3    | 2 Probe  | CCGTCACGCGCTCGTCCATTGTTCA-NH <sub>2</sub>  | 3908 |
|          | Invader  | TGGTCCCTGTTGTATCCTTTC                      | 3909 |
|          | Stacker  | tcatcatcaag'tgggca                         | 3910 |
|          | Arrestor | tgacaatggacgagcg                           | 3911 |
| hMMP3    | 2 Probe  | CCGTCACGCGCTCGTCCATTGTTGAT-NH <sub>2</sub> | 3912 |
|          | Stacker  | catcatcaag'tgggcatc                        | 3913 |
|          | Arrestor | atgaacaatggacgagcg                         | 3914 |
| hMMP13   | 1 Probe  | AACGAGGCGCACTCAAGGATAAGGA-NH <sub>2</sub>  | 3915 |
|          | Invader  | CCTCGGAGACTGGTAATGGCAA                     | 3916 |
|          | Stacker  | agggtcacattgtctg                           | 3917 |
|          | Arrestor | tcctatccctgagtgccg                         | 3918 |
| hMMP13   | 2 Probe  | CCGTCGCTGCGTTTCTTCCC-NH <sub>2</sub>       | 3919 |
|          | Invader  | CAAGCTTTCTCCTGATAGCTCA                     | 3920 |
|          | Stacker  | ctaccccgacttc                              | 3921 |
|          | Arrestor | gggaagaagaacgcag                           | 3922 |
| hMMP13   | 2 Probe  | CCGTCGCTGCGTTTCTTCCCC-NH <sub>2</sub>      | 3923 |
|          | Stacker  | taccccgacttct                              | 3924 |
|          | Arrestor | gggaagaagaacgcag                           | 3925 |
| hMMP13   | 1 Probe  | AACGAGGCGCACCGCATCAAGG-NH <sub>2</sub>     | 3926 |
|          | Invader  | GTTTCTCCTCGGAGACTGGTAATC                   | 3927 |
|          | Stacker  | gataaggagggtcacattg                        | 3928 |
|          | Arrestor | ccttgatgccgtgcgc                           | 3929 |

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|          |   |  |                              |
|----------|---|--|------------------------------|
| hMMP13   | 1 Probe<br>Invader<br>Stacker<br>Arrestor | AACGAGGCGCACTCTTCTCC-NH <sub>2</sub><br>GAACCAAGCTTTCTCCTGATAGCA<br>cctaccgcgact<br>ggaagaagagtgcg                   | 3930<br>3931<br>3932<br>3933 |
| hLipc    | 1 Probe<br>Invader<br>Stacker<br>Arrestor | AACGAGGCGCACCTTTTGTCCGA-NH <sub>2</sub><br>AGAGTGATGGGAATTTCTGCATTTTCTA<br>gtagtgacatggtaaaagtgtt<br>tcggaacaaaaggcg | 3934<br>3935<br>3936<br>3937 |
| hLipc    | 1 Probe<br>Invader<br>Stacker<br>Arrestor | AACGAGGCGCACCTTTTGTCCG-NH <sub>2</sub><br>AGAGTGATGGGAATTTCTGCATTTTCTA<br>agtagcacatggtaaaagtgt<br>cggaacaaaaggcg    | 3938<br>3939<br>3940<br>3941 |
| hLipc    | 2 Probe<br>Stacker<br>Arrestor            | CCGTCACGCCCTCTTTTGTCCGA-NH <sub>2</sub><br>gtagtgacatggtaaaagtgtt<br>tcggaacaaaaggcg                                 | 3942<br>3943<br>3944         |
| hLipc    | 2 Probe<br>Arrestor                       | CCGTCACGCCCTCTTTTGTCCG-NH <sub>2</sub><br>cggaacaaaaggcg   | 3945<br>3946                 |
| r/m Lipc | 2 Probe<br>Invader<br>Stacker<br>Arrestor | CCGTCACGCCCTCGGAGTCAAT-NH <sub>2</sub><br>GCAGGTTGCTGTGTGCAAC<br>gaagagggcacagaag<br>attgactcggagg                   | 3947<br>3948<br>3949<br>3950 |
| r/m Lipc | 1 Probe<br>Invader<br>Stacker<br>Arrestor | AACGAGGCGCACTGATGGGAATTTTC-NH <sub>2</sub><br>GTAATTCCTTCGCCCAGGGA<br>ttattctctttgtcc<br>gaaaattcccatcagtcgc         | 3951<br>3952<br>3953<br>3954 |

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|          |   |  |  |
|----------|---|--|--|
| r/m Lipc | 1 Probe<br>Invader<br>Stacker<br>Arrestor | AACGAGGGCGCACTGCTTCTTCA-NH <sub>2</sub><br>TCTCTTGACTCATCTGCTCTTTA<br>gtctttgactcaggct<br>tgaagaagcagtgccg   | 3955<br>3956<br>3957<br>3958                         |
|          |   | AACGAGGGCGCACTGCTTCTTCA-NH <sub>2</sub><br>TCTCTTGACTCATCTGCTCTTTA<br>ctttgactcaggctac<br>actgaagaagcagtgccg   | 3959<br>3960<br>3961<br>3962                         |
|          |   | CCGTCACGCCCTCGCCCTTTGTTTG-NH <sub>2</sub><br>GGGCAACATTGACATAAAGTGTTCGCTACTCTC<br>ggttcgaattccatgcatc<br>caaacaaaaggcgaggcg  | 3963<br>3964<br>3965<br>3966                         |
|          |   | AACGAGGGCGCACATGTGTAATTAGCT-NH <sub>2</sub><br>GTGGGCACAGAATCCATTTCATCAC<br>cggcaacaagaactttcca<br>agctaaattacacatgigcg<br>AACGAGGGCGCACATGTGTAATTAGCTC-NH <sub>2</sub><br>ggcaacaagaactttccaatat<br>gagctaaattacacatgigcg | 3967<br>3968<br>3969<br>3970<br>3971<br>3972<br>3973 |
| hVCAM    | 1 Probe<br>Invader<br>Stacker<br>Arrestor | AACGAGGGCGCACAGCCCTTTGTTTG-NH <sub>2</sub><br>GCAACATTGACATAAAGTGTTCGCTACTCTC<br>ggttcgaattccatgcat<br>caaacaaaaggcgaggcg  | 3974<br>3975<br>3976<br>3977                         |
|          |   | CCGTCACGCCCTCGCCCTTTGTTTG-NH <sub>2</sub><br>GCAACATTGACATAAAGTGTTCGCTACTCTC<br>ggttcgaattccatgcat<br>caaacaaaaggcgaggcg   | 3978<br>3979<br>3980<br>3981                         |
|          |   |  |  |
|          |   |  |  |

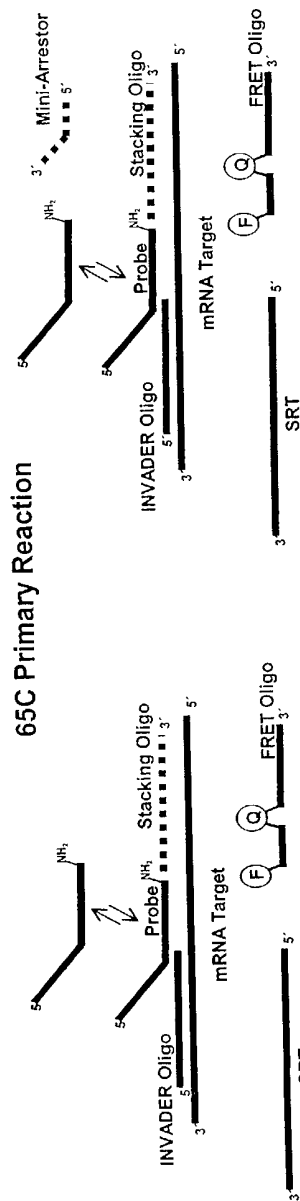




FIGURE 50

**B Mini-Arrestor Format**

**A No Arrestor Format**



**55C Secondary Reaction**



..... 2'-OMe nucleotides